EFFECTIVENESS OF PHYSICAL INFRASTRUCTURE FUNDING ON INCREASED ACCESS TO EDUCATION IN PUBLIC PRIMARY SCHOOLS IN SABATIA DISTRICT, VIHIGA COUNTY

BY

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APRIL, 2013
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Effectiveness of physical infrastructure
DECLARATION

This project report is my original work and has not been presented for a degree in any other university.

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DEDICATION

To God and my dear family, beginning with my loving mum: Gredah and my dad: Ataga for bringing me up responsibly. My dear wife: Susan, my son: Shem and daughter: Melody. I love you very much.
ACKNOWLEDGEMENT

The researcher wishes to acknowledge the contribution of the following. First, my able supervisors: Dr. Ogeta and Mr. Wesonga for their advice, guidance patience and encouragement. Secondly, my examiner: Dr. Onyango and editor: Dr . Bojana whose suggestions enriched my work. I wish also to remember my loving wife Susan for her patience ,prayers and encouragement, my sister Amiliah for urging me on, my children Shem and Melody whose desire to have a successful dad, motivated me.

There many others who played a pivotal role in enabling me achieve this. I appreciate you all.
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<th>Description</th>
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<tbody>
<tr>
<td>AFT</td>
<td>American Federation of Teachers</td>
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<tr>
<td>BEP</td>
<td>Basic Education Project</td>
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<tr>
<td>CDF</td>
<td>Constituency Development Fund</td>
</tr>
<tr>
<td>ASAL</td>
<td>Arid and Semi-Arid Lands</td>
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<tr>
<td>DEO</td>
<td>District Education Officer</td>
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<tr>
<td>DFID</td>
<td>Department for International Development</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>EFA</td>
<td>Education For All</td>
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<td>FPE</td>
<td>Free Primary Education</td>
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<tr>
<td>GoK</td>
<td>Government of Kenya</td>
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<tr>
<td>ICT</td>
<td>Information Communication Technology</td>
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<td>KESSP</td>
<td>Kenya Education Sector Support Programme</td>
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<td>KBC</td>
<td>Kenya Broadcasting Cooperation</td>
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<tr>
<td>LATF</td>
<td>Local Authority Transfer Fund</td>
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<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<tr>
<td>MTP</td>
<td>Medium Term Programme</td>
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<tr>
<td>NARC</td>
<td>National Rainbow Coalition</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Government Organization</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation Development</td>
</tr>
<tr>
<td>OPEC</td>
<td>Oil Producing and Exporting Countries</td>
</tr>
<tr>
<td>PA</td>
<td>Parents Association</td>
</tr>
<tr>
<td>PDE</td>
<td>Provincial Director of Education</td>
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PTA  Parents Teachers Association
UN   United Nations
UNESCO United Nations Educational, Scientific and Cultural Organization
USAID United States Agency for International Development
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The study examined the effectiveness of physical infrastructure funding for primary schools in Sabatia District. Effectiveness was shown by the ability to achieve intended goals and in this study, it was determined by: accountability:-showing results or responsibility for the funds earned earmarked for physical infrastructure, equity: fairness and consideration of inequalities in the availability and use of the funds, adequacy:-sufficiency of funding, how fast funds are available and how well they used for the intended purpose. The main study objectives were: to determine the current status of primary school physical infrastructure funding, to assess the equity issues of this funding and determine the accountability of primary school physical infrastructure investment. The study adopted a descriptive survey research design where 22 schools were sampled through stratified probability and purposive sampling method. The respondents included: 22 head teachers, 44 school management committees, 44 class teachers and pupils. Data was collected using questionnaires, interview schedules, document analysis, focus group discussion and by observation. Questionnaires were used to collect information from pupils and class teachers. Interview schedules were used for the head teachers while focus group discussion was used to get information from the school management committees. Observation schedules were used by the researcher in assessing the general infrastructure. The researcher's instruments were piloted in two public primary schools which were not part of the sample. A test retest method was used to determine the reliability of the instruments. The validity was determined by expert research supervisors among other researchers. Data collected was both quantitative and qualitative. Quantitative data was analyzed through quantitative data techniques using statistical package for social sciences (SPSS). Qualitative data was put under themes consistent with research objects and explained. The conclusion was based on the findings.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Education is the cornerstone of economic growth and social development. It is a principal means of improving the welfare of individuals and primary school education is the foundation (World Bank, 1995). Expansion and success of education relies on infrastructure which affects education access, contributes to quality learning environment and student achievement (Crampton, 2003). Universal Primary Education (UPE) has been emphasized in world conferences on education. The most notable ones are the World Education Forum in Jomtien Thailand in 1990 which advocated for Education for All (EFA). The Dakar Framework for Action in Senegal in 2000 which reiterated this commitment and the millennium summit of September 2000. Achieving UPE is millennium development goal number two (Achieve Universal Primary Education by 2015). UPE was also emphasized in the Monterrey consensus of 2002 and Rome and Paris declaration on alignment and harmonization agreed on in 2003 and 2005 respectively (UNICEF, 2007). Another earlier education meeting, the Addis Ababa Conference of 1961 set a goal to achieve universal enrolment in Primary school by 1980 (Barbara et al, 1997).

Provision of quality education and training has been a critical issue in Kenya since independence. This has been generally due to the increasing demand for more educational opportunities by the growing population (Abagi, 1997). This calls for great investment in Education, especially its physical infrastructure. The United Nations Educational, Scientific and Cultural Organization monitoring report on attainment of Millennium Development Goals (MDGs), described infrastructure as a non negligible cost of achieving Education for All and
MDGs (UNESCO, 2003). The importance of infrastructure cannot be gainsaid. If infrastructure is not sufficient or not maintained, there will be obstacles in education access and participation especially to the vulnerable groups in society. Of more than 115 million school age children out of school in developing countries, the vast majority come from one or more of the traditionally disadvantaged groups in society; rural, female and poor. The three major obstacles to their participation are too few places in schools, too little parental demand for education and too much discriminating treatment in society (Wadi, H, 1980).

Constructing new schools and renovating existing facilities will extend access to these groups. This calls for sufficient funding to avail infrastructure. Adequate levels of fiscal investment in physical infrastructure of schools are essential to ensure that all pupils and staff have access to physical environment conducive to learning that is safe healthy and educationally appropriate (Crampton et al, 2008). Earlier, the World Bank support for education between 1962 and 1972 concentrated on infrastructure. The World Bank’s involvement in education shows that expenditure on construction of physical facilities remains the principal outlay (Theunynck, 2003). Lack of adequate facilities may also result in conditions that compromise student’s safety. Most African countries tend to have problems with school infrastructure. The scenario is pathetic: dilapidated construction, broken chairs and absence of good ventilation and sanitation facilities are common (WB, 1988).

Before independence, the development of primary schools was exclusively in the hands of communities and churches with parents, pupils and communities contributing labour and funds for buildings purchase of teaching materials and furniture (Olembo, 1985). After independence,
financing of primary schools was done through District Education Boards (DEBs) (Eshiwani, 1983). The abolition of school fees increased enrolment figures from 1.86 million pupils in 1973 to over 2.7 million pupils in 1974 an increase of 51% (Republic of Kenya, 1977). With this large enrolment, a countrywide building programme for extra classes was launched (Sifuna, 1990). School committees imposed a building fee for each child and this varied from one district to another due to the socio-economic situations of the area. The rise in extra classes and equipment pushed up the cost of primary school to 35 million pounds compared to 20 million in 1973 (Muhor, 1975).

In 1979, a government directive abolished all forms of school levies and formed Parents Teachers Associations (PTAs). PTAs were supposed to coordinate the collection of funds through voluntary contributions. This never changed the situation as parents were forced to contribute towards development expenditure. The cost sharing introduced in 1988 worsened matters since it increased the parents’ burden. In the Kenya government, Sessional paper no 6 of 1988, the responsibility of the provision and maintenance of physical facility and equipment were firmly placed on parents shoulders (GoK, 1988).

In 2003, the new National Rainbow Coalition (NARC) government reintroduced Free Primary Education (FPE) thus funding education at a unit cost of Ksh.1, 020 per child per annum. This increased enrolment without a commensurate expansion in infrastructure FPE did not require parents to build more schools but were to refurbish existing facilities (Sifuna, 2005). This noble idea (FPE) however, experienced challenges because the government lacked significant funding and infrastructure to adequately provide education to all children. To address these challenges,
the government initiated a sector wide approach (SWAP) in education (MoE, 2005). SWAP is operational through Kenya Education Sector Support Programme (KESSP). KESSP started operating between 2005 and 2010. The (KESSP) comprises 23 programmes focusing on the sector as a whole and primary school infrastructure development is a priority. The second programme under KESSP is aimed at improving primary school infrastructure. KESSP is a sequel to Sessional Paper No.1 2005 which aims at achieving UPE and MDG on education (MoE, 2005). Before the KESSP, there had been a number of initiatives which wholly or partly support primary school construction particularly in Arid and Semi Arid Lands (ASALs). These included: infrastructure support in North Eastern Province sponsored by GoK and United States Agency for International Development (USAID).

This school infrastructure support was to build 215 classrooms in North Eastern Province by September 2005. Others were: Basic Education Project (BEP), a Government of Kenya and Oil producing and Exporting Countries (GoK, OPEC) project that aimed to have 14000 classrooms nationwide by 2007, land resource management project sponsored by Government of Kenya, World Bank, the Community Development Trust Fund (CDTF) and European Union (EU) support to primary schools in all areas. There is also the Constituency Development Fund (CDF) which provides funding to a wide range of community based projects including school construction. This requires effective coordination through District Education Boards (DEBs). The government priority is to ensure affordable and equitable access to education through several strategies including collaborating with private sector, non-governmental organizations and development partners to provide additional facilities. Previous education commissions reports such as: Kamunge Education Report of 1988 and Koech Education Report of 1999 have
placed importance in the provision of schools physical infrastructure. Not very much is known about how construction standards and school upkeep affect the quality of education as indicated by pupil achievement or about the effect of low standard and poorly maintained facilities on pupil’s attendance (MoE, 2005). For this, a survey commissioned by the Ministry of Education found four critical issues relating to infrastructure.

These are:

- Major backlog of infrastructure and shortage of permanent classrooms especially in poor districts.
- Existing school infrastructure is in poor condition due to lack of investment, poor construction standards and inadequate maintenance.
- Limited number of primary schools serving population in isolated rural areas, those living in low income areas with large urban centres and in other pockets of poverty.
- Existing schools require renovation while other schools require new classrooms (MoE, 2003).

KESSP aimed at addressing infrastructure backlog. It targets priority areas except North Eastern Province. It is hoped that if the infrastructure programme is developed and implemented in a holistic way, it has the potential to contribute to the MDG goals. These interventions are made with gender sensitivity in mind especially in relation to health, hygiene promotion, sanitation and provision for children with special needs. This will contribute towards UPE (MoEST, 2005b). KESSP which started in 2005 is now almost over. There have been issues touching on accountability, efficiency, adequacy and equity. For example fraud allegations which led to the United Kingdom (UK) and United States (US) suspending aid support to KESSP (Mars Group,
There have also been allegations of heads inflating enrolment figures. In many schools, head-teachers are diverting funds for supplies and construction to hire more teachers. Such actions could increase physical overcrowding (Ochola et al, 2005). Investment in primary school physical infrastructure therefore has to be effective to realize UPE (Ayogu, 2007).

1.2 Problem Statement

Over the years, various stakeholders ranging from the community-based organizations, private individuals, government, donors, among others have continuously invested in primary school infrastructure. The World Bank indicates that infrastructure comprises a large share of aid to primary education more generally to all children. Actualized physical infrastructure costs are estimated to be at 32 US Dollars per student per year compared to an average income of 60 US dollars (WB, 2010). This is due to the role infrastructure plays towards realizing the goals of Primary education. The Kenya government on its part has renewed her emphasis on primary school infrastructure through the KESSP programme. However, the effectiveness of this investment in Kenyan primary schools has not been adequately investigated. There have been issues of: accountability, efficiency, sufficiency and equity in the availability and use of school physical infrastructure funds. Primary school physical infrastructure is necessary but expensive to finance. This study will explore the accountability, adequacy and equity issues in the availability and use of funds meant for physical infrastructure in schools. This research is based on the understanding that effective physical infrastructure funding of schools plays a vital role towards achieving goals of education especially UPE.
1.3 Purpose of the Study
The purpose of this study was to examine the effectiveness of physical infrastructure funding of primary schools in Sabatia District.

1.4 The Objectives of the Study were:

a) To determine the adequacy of physical infrastructure funding to primary schools in Sabatia District.

b) To examine the level of accountability of funding towards primary schools physical infrastructure.

c) To assess the availability and use of primary schools physical infrastructure to all pupils.

d) To determine the effects of primary school physical infrastructure funding on the school's educational achievement.

1.5 Research Questions
The research questions were:

a) What is the current level and adequacy of physical infrastructure funding to primary schools?

b) How accountable is primary school physical infrastructure funding?

c) To what extent do school physical infrastructure funds take into consideration inequalities?

d) How has primary school physical infrastructure funding affected the school’s educational achievement?
1.6 Significance of the Study

The research helps put renewed interest and inputs in primary school physical infrastructure in order to avoid a situation where investment in school infrastructure in Kenya suffers neglect. This investigation sheds more light on the uses of infrastructure funds and their effect on educational achievement. This will help policy makers and educational planners to prepare better for education in an effort to achieve UPE.

1.7 Limitations and Delimitations of the Study

1.7.1 Limitation

According to (Orodho, 2004) a limitation is an aspect of study that the researcher knows may adversely affect the results of general ability of the study but over which he or she has no direct control over.

The study was conducted in public primary schools in Sabatia District Vihiga County. A major limitation was scarcity of data on success stories on effective school infrastructure funding in Kenya. The nearest attempt as regards this has been KESSP programme pioneered in 2005 and running to 2010 which has not been exhaustively evaluated. Another limitation is that school infrastructure funding has always been part of the overall school funding hence difficulty in getting specific data. Lastly the issue of funds is sensitive touching on the integrity and careers of people. There could have been a tendency of suspicion and misrepresentation of facts in order to deliberately give favourable information.
1.7.2 Delimitations

Orodho (2004) indicates that delimitation is a boundary limitation. The researcher conducted the research in public primary schools in Sabatia District. The study did not cover any school infrastructure funding in special schools, secondary schools or private primary schools.

1.8 Assumptions

The assumptions of the study were:

i. Respondents were accessible to facilitate the success of the study.

ii. Respondents were as sincere as possible and give information to the best of their knowledge.

iii. Primary school teachers and education officials were familiar with infrastructure funding.

iv. Primary schools under study are funded by KESSP, Government support through FPE, parents and donors.

1.9 Theoretical Framework

Every investment has expected future results. To achieve these results, one requires certain sustained efforts. Effectiveness of infrastructural funding would rely heavily on the theory of action. This theory posits that more resources are the most effective means to improve achievement. It was proposed by James Coleman (1986), as an organizing principle to bring together the beliefs and actions of individuals towards a collective goal.

In primary school infrastructure funding, there is need to find means for more resources in order to achieve educational goals. Kenya has been severely constrained in her efforts to achieve UPE.
Public investment in schooling has increased more than tenfold since 2002 in an effort to achieve MDG, (Ochola et al, 2007). This calls for an integrated approach from all stakeholders to issues of education finance (Ibid, 2007). When KESSP programme was launched, there was a major backlog of infrastructure provision and a shortage of which has in many cases suffered from lack of investment over a number of years. While recognizing that communities must remain responsible for the construction and maintenance of facilities, under FPE, the government of Kenya endeavoured to provide additional support to schools in the needy areas (MOE, 2005).

The KESSP programme aims at mobilizing communities, local organizations and other stakeholders to provide support in improving and maintaining existing infrastructure. This cooperation will bring more resources which will result in effectiveness. The KESSP programme is properly organized and from 2005-2010, all primary schools in Kenya except those in North Eastern Province who benefit from other programmes will receive funding.

School improved grants of between 100,000 – 200,000 per year are to be given to 1000 school financially and technically to improve their infrastructure, build capacity to implement, mobilize community support and monitor and evaluate both the programme and impact. (MOE, 2005).

Apart from KESSP other effort aimed at improving infrastructure are going on need to be enhanced.

1.10 Conceptual Framework

The researcher conceptualizes effectiveness of infrastructure funding in terms of accountability, adequacy, and equity. Effectiveness assumes that there is some funding towards primary school physical infrastructure hence the researcher begins with the sources of funds which directly
determine this effectiveness. In this framework, effectiveness entails accountability, adequacy and equity. Accountability is vital wherever and whenever funds are involved. People always want to see results and responsibility for the funds. If a certain amount is given for schools physical infrastructure, those responsible should show results for it. If this is assured, there is effectiveness. Another principle of effectiveness is adequacy. Adequacy arises from the willingness of or availability of resources that will sufficiently realize the goals of education (Crampton et al, 2008). If resources are adequate, the system is effective, (Ozcan, 2008). Absence of effectiveness leads to inadequacy. Effectiveness motivates the sources of funds to release more funds; this subsequently leads to achievement of goals of education. Ineffectiveness on the other hand, discourages the sources leading to less investment hence, difficulty in realizing the goals of education.

To improve the effectiveness KESSP school infrastructure funding, the Ministry of Education has developed guidelines (MoE, 2005). It has also released School Infrastructure Technical Handbook SITH and School Infrastructure Improvement Management Handbook SIIPMH (MoEST, 2007).
In this framework, effectiveness comprises the following: accountability, adequacy, and equity. When physical infrastructure funding responds to the above concepts, then, it is effective. Effective infrastructure funding will translate into good infrastructure hence we shall have good classes, furniture, buildings and learning environment as indicators. A good learning environment will lead to education, success and participation hence leading to the achievement of UPE.

Figure 1.1: A conceptual model of effectiveness of physical infrastructure funding in primary schools

\textit{Adapted from Faith Crampton \textit{et al}, (2003), modified by the researcher}
adequacy refers to sufficiency. sufficient levels of school funding should be available for any infrastructure funding to be considered effective. physical infrastructure funding should also be sustainable. adequacy will be determined by schools physical infrastructure needs and the amount available. schools receive funds for physical infrastructure from various sources. these include: constituency development fund (cdf), kenya sector support programme (kessp), government support and donor support and fees.

school funding should be utilized optimally to achieve results. it should also not be delayed in order for it to achieve maximum results. (ahmed m, 2000) indicates that, focus on physical and infrastructure funding should keep the cost to the bare minimum. effective physical infrastructure funding must also show equity. this involves exhibiting the utmost concern for resource accessibility. ensuring equity means that all students regardless of race, culture, gender,
social-economic status, poor physical limitation among others, have equal opportunities to participate in meaningful and authentic application of education quality (Crampton et al, 2003). Equality refers to consideration of all people including those with special needs and disparities (Crampton et al, 2001).

1.1.1 Operational Definition of Terms

Effectiveness: Ability to attain the determined goal or producing the intended or expected result.

Primary school: An institution where children receive the first major stage of formal education.

Funding: To provide resources in form of money (financing) or other way such as time or effort. Funding also includes investment.

Physical Infrastructure: Site, building, furniture and equipment that contributes to a learning environment. This includes structures such as: Classrooms, toilets, offices, dormitories, libraries, water tanks among others.

Accountability: Being responsible for decisions and action hence providing answers if asked. Accountability here can be manifested in what funds meant for physical infrastructure do: Evidence showing the use of the funds.

Equity: Fairness that takes into account gender disparities, social disadvantages among other things.

Physical: Physical structures among them infrastructure required to be developed and upgraded.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter examined documents and other materials such as books, journals magazines, dissertations, theses and other researcher related to school infrastructure investment in primary schools. The review covers the role of physical infrastructure in school that necessitates funding, effects of this funding and various efforts towards primary school physical infrastructure funding. It also examines norms on school infrastructure as stipulated by the Ministry of Education.

2.2 Role of Physical Infrastructure in School
The study of the effectiveness of physical infrastructure funding in school is influenced by the role physical infrastructure plays in schools. According to Crampton et al, (2003), no study of school funding is complete without a deep concern for the role of physical infrastructure in schools. Every investment must endeavour to be effective. In this review, it is therefore important to look closely at the role of physical infrastructure in school hence need for effective funding. Physical infrastructure has not enjoyed much attention like other factors that contribute to learning and successful achievement of education goals (Fisher, 2000). Its role in the achievement of educational goals, is in effect still debatable. According to Ayogu, (2007) the question is not whether infrastructure matters, but precisely how much it does in different contexts. Preserve articles argues that, the main task of a school is to provide education which involves a series of programmers and activities. The successful conduct of the activities usually depends mainly upon the availability of proper infrastructure which includes physical facilities
in the school like: buildings, ground furniture and apparatus along with equipment essential for imparting education (www.preserve.com) This view is shared by (Fisher, 2000 and Randall, 2002). Physical infrastructure in a school has also an impact on the learning environment. The role of physical infrastructure on learning environment has been extensively examined. One perspective is that it contributes to student identity (Ellis, 2005). Good infrastructure also improves student’s academic achievement. The Primary Education Plan (PEDP) an education development plan for the republic of Tanzania, earmarks school infrastructure as a determining factor towards achieving goals of education. The PEDP indicates that a condition of a school affects learning outcomes. Therefore, a basic minimum package of school infrastructure can contribute towards the achievement of millennium development goals. However, good infrastructure provision alone is clearly not sufficient on its own to improve access and quality. For effective delivery, there should be progress across the board particularly with regard to good quality teachers and learning materials (UNESCO, 2007).

The national commission on excellence in education capacity research practicum and policy makers (NCEECRPP, 1983) recognized that building education capacity was a necessary precondition for sustained educational improvement. According to the commission, educational capacity includes: human, social, physical and fiscal resources needed in schools to achieve educational goals (Crampton, 2008). Physical capital includes physical inputs like infrastructure and related structures. Fiscal capital implies funding and it is required in order to acquire physical capital. (Benson, 1994) asserts that physical capital supports the development of human and social capital. It is a foundation for and a facilitator of human and social development of a school. Thompson and Haggy (in Crampton et al, 2001) developed a comprehensive approach to
the investment in school infrastructure. It involves using funds wisely for the purpose of building the capacity of a school. This includes; maintenance, new construction, renovation, retrofitting and addition to new existing buildings and major improvements. Research on the significant role played by infrastructure on learning outcomes is generating more interest. However, despite much research, a conclusive link remains elusive. This study adds to the growing knowledge in this area.

In summary the review shows that school physical infrastructure plays a significant role in the achievement of education goals. (Fisher, 2000, Crampton, 2008). However, it must combine with other inputs in education for effective achievement of universal goals of primary education. The link between infrastructure and student achievement however, remains elusive.

2.3 Effects of Infrastructure Funding on Education

Infrastructure funding will positively affect the condition of school infrastructure either by making them, sufficient or improving their quality (Mabula, 2011). Poor conditions have been found to affect student access, achievement and teacher productivity. A survey conducted in New York found that after controlling demographics, students at schools with best facilities performed better on standardized tests than schools with the worst facilities. The study on teachers revealed a latency of complaints about school buildings. This include: lack of repair, mould poor indoor quality over crowding rooms used inappropriately, among other things. This had an effect on teachers' morale and retention. The survey found that among teachers who rated their facilities as average or worse, more than 40% said that these conditions led them to
consider leaving the schools and almost 30% were thinking about leaving the profession all together (AFT, 2001).

KPMG infrastructure research, (2008) examines the impact of effective investment in school infrastructure and use of private finance on educational outcomes. The authors found that increased investment in school building leads to improved attainment. In Zambia, inadequate school is part of the reason why some pupils have to drop out of school. Accordingly, a school infrastructure that is developed does not only provide a learning environment that is conducive, but also boasts the morale of teachers and pupils which result into excellent performance from them (Kyambalesa, 2010). Lack of adequate funding could result in inadequate school facilities and this may result into conditions that compromise students’ safety. Students who attend school may be exposed to health threats.

Infrastructure must combine and relate well with other inputs to achieve the goals of education. There is a contention that, the link between school infrastructure and ultimate education are complex. Research for OECD and USA indicates that while adequate infrastructure creates favourable outcomes. The state of physical infrastructure is only one of the many factors which influence the level of educational achievement. Other factors such as curriculum instruction and learning materials are arguably important (Earthman, 1998).

A US Department of Education paper concludes that a good facility appears to be an important precondition for student learning provided that other conditions are present, support a strong academic programme (USDE, 1998). The World Bank criticizes African countries for
concentrating on quantitative education. It says that emphasis should be on the learning materials and quality of instruction. Theunynck, (2003) and Ochola et al, (2005) appreciate the giant steps by African governments towards UPE through improvements of their school infrastructure. The research literature on effect of infrastructure indicates that apart from availing the resources, they must be used effectively and efficiently. According to Fuller (1997), it is the way the schools use their resources that is most important.

The literature review on effects of funding for physical infrastructure in school, suggests that good investment in infrastructure gives positive outcomes (Mabula, 2011). Alternatively, Poor investment has a negative impact (KPMG, 2008). The review also shows that resources in education are limited and competing hence a definite plan for them is needed (Theunynck, 2003, Fuller 1997). Another observation is that, funding for school infrastructure needs to be emphasized due to its relevance on academic success. (Crampton et al, 2008). An improved level of coordination of the scarce resources must therefore be allowed (Theunynck, 2003). This study emphasizes this need.

2.4 Funding Primary School Physical Infrastructure

Funding for physical infrastructure in primary school, has over the years been part of the overall school financing. Physical infrastructure funding will involve the funds or efforts expected on building, land, physical environment, furniture and black wall either in form of repair and maintenance, construction and infrastructure management. Primary school physical infrastructure funding has been a challenging undertaking especially due to scarcity of resources and capacity constraints (Elcher, 1989). The result is that school physical infrastructure funding
lags behind compared to progress in funding other areas of school education needs. (Crampton et al., 2008), indicates that although school infrastructure has not enjoyed the high profile role like school reform, budgeting for it plays a critical role in funding for education. Funding for physical infrastructure is both external and by communities the latter is only effective in cases in which the community desires to make future sacrifices to satisfy the practical needs. External help should just be a supplement (Theunynck, 2003). One of the most significant external funding bodies for education is World Bank which in 1963 issued its first educational loan targeting infrastructure. (WB, 1988).

In many parts of the world especially the developing world, funding primary school education infrastructure has been largely dependent on local community. For instance in Burma, the Parents’ Teachers Association (PTA) has a major input in financing education (Black & Scendlen, 1980). A survey of 1972/73 by the Ministry of Education there revealed that the PTAs provided for 21.2% of the cost of building 63.8% of the cost of furniture and equipment, 63.4% repairs and 87.7% of general contingencies. In Malasia, it is the parents associations (PAs). The role of the parents associations is primarily that of material support; for example, contributing to building of school halls, canteens and adding classes. The PAs have come to play a central role in construction and maintenance of building and facilities in association with the local education councils. PAs persuade and encourage local production and trading establishments in building educational facilities. In Vietnam, most primary schools have been built by people through the PAs and the local educational councils. The association is also involved in the provision of desks, benches and in teaching aids etc (Thinh, 1991).
The summary of literature review here indicates that funding for the school physical infrastructure has been a major undertaking by parents through their school associations. External help is only limited (Theunynck, 2003) its success therefore, depends on the sacrifices these communities make.

2.5 Infrastructure Funding in Africa

After independence, most African countries concentrated their attention on expansion of educational facilities to achieve access and equity (Otiende et al, 1992). In 1961, a joint conference organized by the UNESCO United Nations Educational and Cultural Organization and United Nations Economic Commission for Africa noted that the cost of producing any quality education was three times higher in developing countries than the developed. It was suggested that education cost could be reduced by for example, greater help in self-help building. Many African countries had experienced deficits in that; they had to implement the Addis Ababa conference. In 1960s communities, parents and local authorities were principally responsible for capital investment in primary education throughout East Africa (Bogonko, 1992). The communities' contributions ranged from poles, thatch cash and labour.

In 1974, the World Bank report on education suggested a number of broadened sources of revenue for education beyond the limits of regular government budgets which included various methods by which those who received education could pay greater share of its cost (Sifuna, 1990). It is with these trends that the infrastructure was somehow neglected (Olembo, 1985, Sifuna, 1997). This state of affairs was to manifest greatly with the introduction of free primary education (FPE) in Kenya in 2003. One-point three million new pupils poured into the country's
primary schools overwhelming school infrastructure, (UNICEF, 2006). The 2003 school facilities census estimated that, nationwide, there was a shortfall of 43,000 classrooms although it was not clear what proportion of these are existing semi-permanent (MoEST, 2007 census, data).

Even after the government offered to give Ksh.1,020 per child to subsidize education, FPE did not give much emphasis to physical school infrastructure. FPE funds were released in two batches. Heads of schools were required to open two accounts. The first account known as Simba Account was to have Ksh.650 per child to cater for school instructional materials like books and chalk. The second Account was for operational expenses. It had Ksh.370 per child and this catered for expenses like salaries, water and electricity bills and other day-to-day activities. One way to correct the situation was through KESSP primary school infrastructure investment programme which focuses on improving existing school infrastructure, particularly in disadvantaged communities of the country especially primary ASAL high density urban areas and pockets of poverty in high potential areas. The programme has two main components to be implemented from 2005-2010, the budget for the 5 years period is Kshs.5,786,920,000. These components include:

1. School improvement grants (Basic and additional)
2. Construction of new primary schools.

The money was to be offered on thresholds based on enrolment. For example, a school with less than 300 pupils was to be awarded Kshs.100,000, that one of between 300-500 pupils: Kshs.150,000 and schools of more than 500 pupils: Kshs.200,000.
The KESSP however, emphasizes on the need to mobilize community-based organizations and other stakeholders to provide support in improving and maintaining existing infrastructure. Community contribution either in terms of financial resources depending on the economic level or in kind will be required to support government and other pertinent contributions. The Kenyan government has come up with specific guidelines on accountability and use KESSP funds. This is contained in two manuals: Kenya Education Sector Support Programme Technical Handbook & Kenya Education Sector Support Programme Management Handbook. The technical handbook contains the school infrastructure development planning (SIDP) guidelines. These include: establishing a school infrastructure development plan, assessing what infrastructure the school has, determining the need of the school, preparation of the school infrastructure development plan, prioritizing, action planning, approval by stakeholders and evaluation. This manual focuses on particular step required for a strategic planning of primary school infrastructure by a school and its various stakeholders. (KESSP, Technical Handbook, 2007). This manual supports the school management handbook that provides complimentary guidance on the organizational framework relevant for developing and forming the school infrastructure committee as well as managing the entire implementation process. (School Infrastructure Improvement Programme Management Handbook, 2007).

Vision 2030 also recognizes the need for proper priority towards school physical infrastructure. In its medium-term project (MTP) for 2008-2010, education has been identified as one of the eight sectors that will contribute to the national development under vision 2030. One of the identified flagship programmes is attainment of education for all by 2015. MTP emphasizes that the government will develop an infrastructure programme to rehabilitate schools (Vision, 2030).
Apart from these, there is need for accountability to make the infrastructure funding effective. In January, 2010, the Presidential Press Service (PPS) reported that, the president of Kenya, Mwai Kibaki asked parents to demand accountability for the funds given or distributed to schools. The president noted that the funds were meant for development of local schools and creation of an environment conducive for learning.

In summary funding for school facilities in Africa was greatly emphasized at independence. Otiende, et al, 1992). However the cost of providing it was found to be three times higher compared to the developed world. This led to self help where parents became more responsible for capital investments in education. (Bogonko, 1992). These trends led to infrastructure neglect. This was manifest greatly with the introduction of FPE in which the large number of pupils joining school, overwhelmed the infrastructure. FPE did not give much emphasis to infrastructure (UNESCO, 2005). In Kenya, an attempt to address the situation was through (KESSP-2005-2010) which aims at mobilizing resources for infrastructure improvement. KESSP emphasizes planning, accountability for resource use and community participation through empowerment. This study examines to what extent this has been done in Sabatia District, Vihiga County.

2.6 School Physical Infrastructure Norms in Kenya

Norms are specifications for school physical infrastructure. They are classified as school basic physical infrastructure and sanitation infrastructure. According to UNESCO (2005), appropriate and sufficient building, child friendly, safe environment enhance child rights. The Ministry of Education in Kenya has come up with safety standards manual for schools in Kenya (MoE, 2005). This emphasizes the importance of complying with education act (Cap 211) and public
health act (Cap 242). The manual discusses size and number of physical infrastructure for resistance and recommends the need for sufficiency. According to this act's physical infrastructure includes structures such as classrooms, kitchen, laboratories, water tanks, playground, and equipment among others. The facilities can be either permanent or temporary. Such structures are supposed to be appropriate, adequate and properly located devoid of any risks to users.

According to the manual, the Ministry of Education specifies that the length and width of a classroom should be 7.5*5.85 or 7.5*6.0. The classes should accommodate a maximum of 30 learners as one seater desks or 40 learners into two seater desks in line with the Ministry of Education circular on health and safety standards 2001. Classrooms should be properly lit and ventilated; the floors should be level and clean always. For cemented floors any cracks should be repaired in good time. Mud walls and floors regularly smeared with dung. According to the same circular, efforts should be made to cement all floors. The furniture in classrooms, especially the desks, should be appropriate for use by both male and female learners. Poorly constructed or inappropriate desks can lean to physical deformities such as curvature of spine, contraction of chest, confirmed stoop among others. This can cause tension among learners. The class teachers should ensure that desks are arranged in a manner that facilitates easy and orderly movement of learners in the class. Each desk should have no more than 3 learners and the space between any two desks should be at least two feet. Buildings should be accessible by special needs learners. For a boarding school, dormitories, should be clean, safe, well ventilated and provide space for pupils. This also applies to libraries.
Sanitation infrastructure must be safe and build to the required standards. Pit latrines should be built at least 10 metres away from tuition. When ablution block is attached to the other buildings a high degree of cleanliness must be maintained. Pit latrines should be at least 15 metres away from a water point. In mixed schools, girls’ sanitation facilities must be separate and offer complete privacy. In construction of sanitation facilities, the following must be observed. The first thirty learners, 4 closet holes. A maximum of 270 learners: one closet for thirty learners. In all schools, appropriate provision should be given to learners with special needs.

The government of Kenya has specific norms for school infrastructure, (MoE, 2008). This study helps establish the extent to which these norms have been complied with specific reference to Sabatia district Vihiga county.

2.7 Summary

The literature review has shown the importance of effectiveness of physical infrastructure funding in primary schools has shown that any study of school funding has to take into account school physical infrastructure (Crampton and Thompson), 2003). The review has also attempted to establish a link between a school’s physical infrastructure funding and quality education. Studies also show that effective school physical infrastructure funding will positively affect school quality (AFT 2008). However, most studies: Carr Hill, (2010) and Crampton et al, (2008), have concentrated on the effect of infrastructure funding on specific learning outcomes for example, teacher and student motivation. The literature review indicates that physical infrastructure in primary schools has to a large extend has been funded by parents, communities and donors with the government providing support (Sifuna, 1974), (Bogonko 1992). It has also
been established that infrastructure funding is expensive but necessary. All these point to its importance. In Kenya, physical infrastructure funding for schools received a boost with the introduction of the SWAP in education through KESSP which aims at mobilizing all stakeholders to provide support in improving and maintaining existing infrastructure (MoE, 2005). The government has given guidelines on accountability and use of KESSP funds through school infrastructure improvement programme management handbook and KESSP school infrastructure technical handbook to ensure effectiveness. Other stakeholders in primary school funding also have their demands for effectiveness. Despite all these efforts, there is need to examine the effectiveness of investment in primary school infrastructure funding. Giving guidelines is not enough. This study aims to fill the gap by establishing the effectiveness of physical infrastructure funding in public schools in Sabatia District, Vihiga County.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter is concerned with the description of methods to be applied in carrying out the research study. It includes: study locale, target population, sample techniques and sample size, research instruments and data collection.

3.2 Design of Study
The study utilized an exploratory approach using a descriptive survey design to investigate the effectiveness of physical infrastructural funding in primary schools. Descriptive survey design is used in preliminary and exploratory studies. This is according to Luck & Ruben, (1987). Borg and Gall (1989) note that descriptive survey research is intended to produce statistical information about aspects of education that interest policy makers and educators by involving a broad category of stakeholders. The study fitted within the cross sectional sub-types of descriptive survey design.

3.3 Study Locale
The study was based in Sabatia District. Sabatia District is found in western region of Kenya. It was created from Vihiga District in 2005. The region is densely populated and relied on peasant farming for education and other development activities. The climatic condition is favourable for growth of cash crops like tea and coffee which some parents rely on to support their pupils in schools. It has two education divisions namely Sabatia and Chavakali. Each Division has two education zones. Sabatia Division has Sabatia East and Sabatia West education zones while

28
Chavakali consists of Chavakali North and Chavakali North zones. In total, four zones. The socio-economic situation of schools in the district offers the necessary variety required for this study. Sabatia has 103 schools as summarized in the table 3.1 below:

### Table 3.1 Number of Public Primary Schools in Sabatia District

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Girls</th>
<th>Boys</th>
<th>Mixed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boarding</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Day</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>0</td>
<td>101</td>
<td>103</td>
</tr>
</tbody>
</table>
Table 3.2 Sabatia Education Zones and Enrolment in Classes 7 & 8 in 2011

<table>
<thead>
<tr>
<th>Zone</th>
<th>Class</th>
<th>Boys</th>
<th>Girls</th>
<th>Number of Schools</th>
<th>Total</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chavakali North</td>
<td>7</td>
<td>369</td>
<td>364</td>
<td>29</td>
<td>733</td>
<td>1527</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>380</td>
<td>414</td>
<td></td>
<td>794</td>
<td></td>
</tr>
<tr>
<td>Chavakali South</td>
<td>7</td>
<td>381</td>
<td>472</td>
<td>22</td>
<td>853</td>
<td>1478</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>281</td>
<td>344</td>
<td></td>
<td>625</td>
<td></td>
</tr>
<tr>
<td>Sabatia East</td>
<td>7</td>
<td>560</td>
<td>689</td>
<td>29</td>
<td>1249</td>
<td>2165</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>36</td>
<td>480</td>
<td></td>
<td>916</td>
<td></td>
</tr>
<tr>
<td>Sabatia West</td>
<td>7</td>
<td>478</td>
<td>511</td>
<td>23</td>
<td>989</td>
<td>1703</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>351</td>
<td>363</td>
<td></td>
<td>714</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>3226</td>
<td>3637</td>
<td>103</td>
<td>6833</td>
<td>6833</td>
</tr>
</tbody>
</table>

Source: Sabatia Education Office, 2011 Primary School Enrolment Data

3.4 Target Population

Kombo and Tromp (2006) define a population as a group of individual’s objects or items from which samples are taken from for measurement. For this study, the researcher targeted all the 103 public primary schools in Sabatia District and the stakeholders involved in funding and management of school infrastructure funds. These are: 103 Head teachers, 206 School Management Committee members and 6833 pupils preferably from standard 7 & 8. The present enrolment in standard 7 & 8 in the district stands at 6833 pupils as shown in table 3.2 above.
3.4.1 Sampling Techniques and Size

To determine the sampling techniques and size, the researcher, after weighting each the sampling units in the research, will utilize a combination of probability and non-probability sampling techniques. Chava, F and Nachmas, (1996) indicate that the researcher has to establish the weight of the sampling units and employ appropriate sampling techniques. They add that the choice of the sample size must be chosen by some logical process and should be determined by the researcher depending on the following: Population, type of study, standard of accuracy desired, and availability of resources among other. In this study, all the education officials in the district will be used due to their small number and oversight role they play in school funding. The primary schools for the study were selected from the various zones where random sampling was used to select 5 schools from every zone. The head teachers and executive school committee members of the school identified were used in the study. The researcher then purposefully picked two boarding schools out of the three in the district. One mixed boarding and one, girls boarding. Mugenda & Mugenda (1999) observe that the goal of purposive sampling is to select cases that are likely to be information rich with respect to the purpose of the study. The schools selected, give a sample of 21%. Cohen & Manion, (1994), state that a sample of between 20-30% is accepted in a survey. For pupils, the researcher established the desired sample size using the formula recommended in Mugenda (1999) and revisited by Kothari, (2009) as shown below:

\[
\text{Sample size: } \frac{384}{1+384/6833} = 364
\]

Where:

\[
f_n = \frac{n}{1+(n/N)}
\]

nf - The desired sample size when population is less than 10,000
n - Desired sample when population is more than 10,000 and this is given as 384.

\[ N = \text{Estimate of population size.} \]

Using this formula, the pupils sample size will be = 364

The researcher then got an equal number of pupils from schools selected. This gave a total 26 pupils from each school. 13 boys and 13 girls selected through systematic sampling.

<table>
<thead>
<tr>
<th>Table 3.3 Sampling Grid on population and sample of study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Head teachers</td>
</tr>
<tr>
<td>School Management Committee</td>
</tr>
<tr>
<td>Schools</td>
</tr>
<tr>
<td>Pupils of STD 7 &amp; 8</td>
</tr>
</tbody>
</table>

3.5 Research Instruments

In this research, instruments that were used are questionnaires, interview, and document analysis and observation schedules.

3.5.1 Pupils and Class Teachers Questionnaire

Questionnaires were used to elicit information from teachers. Questionnaires are used to gather information over a large sample (Mugenda & Mugenda, 2003). Pupils are the majority hence the instrument were appropriate for them. Only class seven and eight pupils were used because infrastructure funding is a technical area which could not be understood by the lower classes.
There were also questionnaires for class teachers. The questionnaires were open-ended and matrix questions. Matrix questions had open and closed-ended questions. The pupils and class teachers’ questionnaire (appendix I and II) sought information on condition of their classes, adequacy of physical facilities and the pupils’ attitude towards these.

3.5.2 Head teachers and Parents Interview Schedules

The interview schedule was made for the head teachers who may not have enough time to fill the questionnaire. Interviews have the advantage probing further for clarity of ideas. The head teachers’ interview sought information on funding policy, disbursement of funds and acquisition of physical facilities, repair and construction. They were also asked about the adequacy of the facilities and how much they contribute to conducive learning.

3.5.3 Focus Group Discussion

This was used to collect data for the school management committee on adequacy and equity of infrastructure funding.

3.5.4 Document analysis

Various documents were analyzed including class register and handbooks on physical infrastructure funding to find out the actual number of pupils enrolled in classes in schools in relation to the number of toilets, furniture and classes.

3.6 Pilot Study

Piloting was conducted in two schools prior to study. These schools were used to test the validity and reliability of the instruments.
3.6.1 Validity

Validity is concerned with establishing whether the content: questionnaire, interview and checklist are measuring what they are supposed to measure (Gay, 1992). Orodho, (2009) defines it as the degree to which a test measures it purports to be measuring. The face validity was assessed through expert judgment of the university supervisors to determine whether the items accurately represent the variables under study. Validity in qualitative research tends to relate to the extent that the researcher provides an authentic account of the participants’ voices Gay (1992) as well as a reflective account of the researcher’s role in the production of the data.

3.6.2 Reliability

It is the degree to which a test consistently measures whatever it measures (Kombo et al, 2006). That is, the ability to consistently yield the same results when repeated measurements are taken of the same object under the same conditions (Gay, 1999). Reliability used in quantitative methods involves choosing measures that demonstrate consistency and replicability over time over instrument and over groups of respondents (Cohen et al., 2000;117).

Reliability was tested using the test re-test method. It was administered to a group of respondents in the pilot study. The research test was then administered to the same respondents after two weeks. The scores were then computed to establish Pearson’s product moment correlation co-efficient using the formula:

\[ R = \frac{\sum XY}{\sqrt{\sum (X^2)(Y^2)}} \]
3.7 Data Collection

This involved self-administered questionnaires, interview and observation schedules. At first, the researcher requested for an introductory letter from Kenyatta University. He then sought a permit from the National Council for Science and Technology within the Ministry of Education. This was presented to the Provincial Director of Education and the District Education Officers in charge of the Province and District for authority to carry on with research in the study locale. He then visited schools for introductory purposes and requested for appointment from the head teachers about the nature of the study.

On the appointment day, the researcher sampled the responses from the pupils and then explained to them the purpose of the study and what was required of them. The researchers then assured the respondents of confidentiality and distributed the questionnaires to them and asked them not to indicate their names. The researcher then collected the completed questionnaires to avoid distortion of the respondents' answers by other pupils. The sampled class teachers were given the questionnaires and assured of their confidentiality. When they were through, the researcher collected the questionnaires. The head teachers in each school were interviewed in their respective offices. School management committee members were given appointments and interviewed. The observation schedules were completed by the researcher in the sample schools during the study. All completed instruments were bound separately depending on their category and sample school.
3.8 Data Analysis

The collected data was organized, broken into manageable units according to the theme of the study and coded before being subjected to statistical analysis. All the obtained data was analyzed quantitatively using descriptive statistics. The findings were presented using tables of frequency distributions, percentages, pie charts and bar graphs.
CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter deals with data analysis and discussion of results. The data was analyzed using the statistical package for social sciences and presented as frequencies and percentages in tabular form. Other related data is provided descriptively in this chapter. The purpose of this study was to examine the effectiveness of physical infrastructure funding of primary schools in Sabatia District.

The following research questions were answered in this chapter.

(i) Is physical infrastructure funding to primary schools in Sabatia district adequate?
(ii) What is the level of accountability of funding towards primary schools physical infrastructure in Sabatia district?
(iii) Are schools physical funds available and used by all pupils?
(iv) What are the effects of primary school infrastructure funding on the school’s educational achievement?

4.2 Adequacy of Physical Infrastructure Funding

In the literature review section the importance of adequate funding for physical infrastructure in schools in Kenya has been emphasized. The national commission on excellence in education capacity research practicum and policy makers (NCECRPP, 1983) recognized that building education capacity was a necessary precondition for sustained educational improvement. The researcher with the intention of finding out whether physical infrastructure funding in Sabatia
District primary schools were adequate or not used questionnaires, interview schedules and observation research methods among pupils, teachers, head teacher, and school management committees.

The table below indicates the number of all the actual respondents who participated in the study against the sampled respondents.

<table>
<thead>
<tr>
<th>RESPONDENTS</th>
<th>SAMPLED</th>
<th>ACTUAL RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils</td>
<td>364</td>
<td>262</td>
</tr>
<tr>
<td>Class teachers</td>
<td>44</td>
<td>36</td>
</tr>
<tr>
<td>Head teachers</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Management committees</td>
<td>44</td>
<td>32</td>
</tr>
</tbody>
</table>

The researcher in the questionnaires to the pupils and class teachers sought to find out the various sources of funding towards physical infrastructure in Sabatia District schools. The results indicated that schools relied much on funding from the Constituency Development Fund (CDF). The table below shows the various responses by pupils, teachers, head teachers and management committees on the sources of funding for physical infrastructure development.
### Table 4.2 Various Responses by Various Stakeholders on Source of Funding

<table>
<thead>
<tr>
<th></th>
<th>CDF</th>
<th>LATF</th>
<th>DONORS</th>
<th>KESSP</th>
<th>GOVT</th>
<th>OTHERS</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pupils</strong></td>
<td>180(69%)</td>
<td>0(0%)</td>
<td>62(23%)</td>
<td>0(0%)</td>
<td>20(7.6%)</td>
<td>0(0%)</td>
<td>262</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>24(66%)</td>
<td>1(2.7%)</td>
<td>6(16%)</td>
<td>2(5.5%)</td>
<td>2(5.5%)</td>
<td>1(2.7%)</td>
<td>36</td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Head</strong></td>
<td>8(44%)</td>
<td>2(11%)</td>
<td>2(11%)</td>
<td>1(5.5%)</td>
<td>5(27%)</td>
<td>0(0%)</td>
<td>18</td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td>18(56%)</td>
<td>3(9.3%)</td>
<td>1(3.1%)</td>
<td>1(1.1%)</td>
<td>9(28%)</td>
<td>0(0%)</td>
<td>32</td>
</tr>
<tr>
<td><strong>committees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>230(66%)</td>
<td>6(1.7%)</td>
<td>71(20%)</td>
<td>4(1.1%)</td>
<td>36(10.3%)</td>
<td>1(0.2%)</td>
<td>348</td>
</tr>
</tbody>
</table>

The table above shows that 230 respondents representing 66 percent indicated that funding for schools was by (CDF) while 6 representing 1.7%, said that funding was by (LATF), 71 representing 20% said that their schools received funding from donors. Four respondents representing 1.1% said they got theirs from (KESSP), 36 representing 10% said their funding was by the government.

The above results show that many schools over relied so much on funding from one major source that is CDF followed by the government. This is seen as the reason why many of the respondents complained that the funding to their schools was inadequate.

The questionnaire to the teachers sought to find out the sufficiency of funding to their schools. Out of the 36 class teachers who filled the questionnaires, all indicated that funding to their schools were insufficient. The table below shows this.
### Table 4.3 Responses on Adequacy of Physical Infrastructure Funding among Zones in Sabatia District

<table>
<thead>
<tr>
<th>ZONE</th>
<th>SUFFICIENT</th>
<th>NOT SUFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>0</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Class teachers again were requested to indicate in the questionnaire the adequacy of facilities such as classes and furniture using four parameters as follows.

V.A - very adequate, A - adequate, F.A- fairly adequate, N.A - not adequate. Their responses are represented in the table below

### Table 4.4 Responses on Adequacy of Physical Infrastructure.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>CLASSES</th>
<th>FURNITURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V.A</td>
<td>A</td>
</tr>
<tr>
<td>SABATIA WEST</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>
The results above show that 22 class teachers indicated that their classes were fairly adequate while 14 of them indicated that they were inadequate. On furniture 12 teachers said that they were fairly adequate while 24 said that they were inadequate. The fact that many of the teachers who filled the questionnaires reported of inadequacy in terms of the number of classes and desks signifies that schools in Sabatia District received inadequate funding.

The questionnaire for the students required them to show whether they were comfortable with their classes, toilets, furniture, and dormitories. They were to respond to the question using four parameters as follows.

**V.C** - Very comfortable, **C- 1**, **F.C** fairly comfortable, **N.C** - Not comfortable. Their responses are represented in the table below.

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>V.C</th>
<th>C</th>
<th>F.C</th>
<th>N.C</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSES</td>
<td>0</td>
<td>62</td>
<td>80</td>
<td>120</td>
<td>262</td>
</tr>
<tr>
<td>TOILETS</td>
<td>0</td>
<td>0</td>
<td>82</td>
<td>180</td>
<td>262</td>
</tr>
<tr>
<td>FURNITURE</td>
<td>0</td>
<td>69</td>
<td>142</td>
<td>51</td>
<td>262</td>
</tr>
<tr>
<td>DORMITORY</td>
<td>0</td>
<td>20</td>
<td>32</td>
<td>18</td>
<td>70</td>
</tr>
</tbody>
</table>

The results indicates that out of 262 pupils who responded to the question on comfort ability pertaining classes, 62 pupils representing a percentage of 23% said that they were comfortable. Eighty pupils representing 30% said that they were fairly comfortable and the remaining 120
pupils representing 45% said that they were uncomfortable. On toilets, no pupil was comfortable, 82 of them representing 31% said they were comfortable while 180 pupils a percentage of 69% said they were uncomfortable. On furniture, 69 pupils representing a percentage of 26% reported that they were comfortable, 142 pupils representing 54% said they were fairly comfortable while the remaining 51 pupils representing 20% said they were uncomfortable. The responses by pupils from the two boarding schools show that 20 pupils representing a percentage of 28% reported that they were comfortable, 32 of them representing a percentage of 46% said that they were fairly comfortable and the remaining 18 pupils representing 26% said they were uncomfortable. The pupils' questionnaire required them to indicate whether their desks were one or two seater. The table below shows their responses.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>ONE SEATER</th>
<th>TWO SEATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>42</td>
<td>82</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>42</strong></td>
<td><strong>220</strong></td>
</tr>
</tbody>
</table>

The results above show that all the respondents of Sabatia West, Sabatia East and Chavakali South said that their schools had two seater desks while forty two respondents of Chavakali North said they had one seater and the remaining 82 said that they had two seater desks.
The questionnaire again on the pupils required them to show their feelings pertaining the level of funding for physical infrastructure in their schools using the following parameters.  
V.A – very adequate  
A - Adequate  
F.A – Fairly adequate  
N.A – Not adequate

The responses are represented in the table below.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>V.A</th>
<th>A</th>
<th>F.A</th>
<th>N.A</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td>0</td>
<td>3</td>
<td>11</td>
<td>15</td>
<td>29</td>
</tr>
<tr>
<td>SABATIA WEST</td>
<td>0</td>
<td>10</td>
<td>27</td>
<td>28</td>
<td>65</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>0</td>
<td>6</td>
<td>13</td>
<td>25</td>
<td>44</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>0</td>
<td>31</td>
<td>41</td>
<td>52</td>
<td>124</td>
</tr>
<tr>
<td>TOTALS</td>
<td>0</td>
<td>50</td>
<td>92</td>
<td>120</td>
<td>262</td>
</tr>
</tbody>
</table>

The results above show that out of 262 respondents, 50 pupils representing 19% said the funding was adequate, 92 pupils representing 35% said that funding towards physical infrastructure in their schools were fairly adequate while 120 pupils representing 46% said that the level of funding were inadequate.

The class teachers' questionnaires required them to indicate whether their schools had one or two seater desks.
It further requested them to indicate whether the spacing between the said desks were there.

Their responses are as in the table below.

### Table 4.8 Responses on Adequacy of One seater and Two seater Desks

<table>
<thead>
<tr>
<th>ZONE</th>
<th>TYPE</th>
<th>ONE SEATER</th>
<th>TWO SEATER</th>
<th>ADEQUATE</th>
<th>NOT ADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td></td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td></td>
<td>0</td>
<td>8</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td></td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>CHAHVAKALI NORTH</td>
<td></td>
<td>6</td>
<td>12</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td><strong>6</strong></td>
<td><strong>30</strong></td>
<td><strong>16</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Figure: 4.1 A Bar Graph Showing Adequacy of One Seater and Two Seater Desks.
The above results show that 6 teachers in all the four zones representing 17% indicated that their schools had one desk seaters while the remaining 30 class teachers representing 83% said that their schools had two seater desks. On spacing between desks, 16 teachers from all the zones representing 44% said that the spacing was adequate while the remaining 20 teachers representing 56% reported that the spacing was inadequate.

Again teachers in the questionnaire were required to indicate whether they were satisfied with the general condition of physical funding using four parameters as follows.

V.S – Very satisfied
S – Satisfied
F.S – Fairly satisfied
N.S – Not satisfied

<table>
<thead>
<tr>
<th>ZONE</th>
<th>V.S</th>
<th>S</th>
<th>F.S</th>
<th>N.S</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>0</td>
<td>3</td>
<td>8</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>TOTALS</td>
<td>0</td>
<td>6</td>
<td>14</td>
<td>16</td>
<td>36</td>
</tr>
</tbody>
</table>

The results above indicate that a total of 6 teachers representing 16% said that they were satisfied with the general condition of their schools, 14 class teachers representing 39% said that they were...
fairly satisfied while the remaining 16 teachers representing 44% said that they were not satisfied.

Figure 4.2 A Bar Graph showing Responses of Teachers from Zones on their Feeling about School Physical Infrastructure Funding

![Bar Graph](image)

Objective number two of the study was to examine the level of accountability of funding towards primary schools in Sabatia district. The following Tables show how class teachers and pupils of standard seven and eight responded.
Table 4.10 Table indicating class teachers’ responses on whether their schools showed how funds received for infrastructure improvement were being used

N=36

<table>
<thead>
<tr>
<th>ZONE</th>
<th>SHOWN</th>
<th>NOT SHOWN</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA EAST</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>SABATIA WEST</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>CHAVAKALI</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>SOUTH</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
</tbody>
</table>

The results above show that out of the 36 teachers who filled the questionnaires, 22 representing 61% said that their schools showed how finances received were being used while 14 teachers representing 39% said that there was no accountability on how finances received for infrastructure improvement were being used. The class teachers again were in the questionnaire requested to either agree or disagree on whether they thought that money disbursed to their schools were being used well. Their responses are as shown in the table below.
Table 4.11 Indicating class teachers’ responses if they agree or disagree on whether they thought that money disbursed to their schools were being used well

<table>
<thead>
<tr>
<th>ZONE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>5</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>CHAVAKALI</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>SOUTH</td>
<td>11</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>TOTALS</td>
<td>23</td>
<td>13</td>
<td>36</td>
</tr>
</tbody>
</table>

The results above indicate that 23 teachers representing 64% said that money disbursed to their schools for physical infrastructure were utilized well while 13 class teachers representing 36% said that funds were not being utilized well.

Class teachers again were requested to indicate their satisfaction on the way accountability was being done using the following three parameters.

V.S – very satisfied
S – Satisfied
N.S – not satisfied

Their responses are as shown in the Table below.
Table 4.12 Tables indicate class teachers’ responses on whether their schools were accountable to the funds given

<table>
<thead>
<tr>
<th>ZONE</th>
<th>V.S</th>
<th>S</th>
<th>N.S</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>WEST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STABATIA</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>EAST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHAVAKALI</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>SOUTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHAVAKALI</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>NORTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>36</td>
</tr>
</tbody>
</table>

The table above indicates that out of the 36 teachers who filled the questionnaires, 4 teachers representing 11% reported that they were very satisfied, 18 teachers representing 50% said that they were satisfied while the remaining 14 teachers representing 39% said that they were not satisfied with the way accountability was being done.

Question four of the teachers’ questionnaire required them to indicate whether they were aware of the presence of measures to enhance accountability in their schools. The Table below shows their responses.

**Key**

SIC- School infrastructure committee

SIDP – School infrastructure development plan.
Table 4.13 Indicating class teachers' responses to whether their school had infrastructure committee

<table>
<thead>
<tr>
<th>ZONE</th>
<th>SIC</th>
<th>SIDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>THERE</td>
<td>NOT THERE</td>
</tr>
<tr>
<td>SABATIA WEST</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>TOTALS</td>
<td>21</td>
<td>15</td>
</tr>
</tbody>
</table>

The results above indicate that 21 teachers representing a percentage of 58 reported that their schools had school infrastructure committee while 15 teachers representing 42% said that there were no school infrastructure committees in their schools. On the presence of school infrastructure development plans, all the 36 teachers representing 100% who filled the questionnaires said that their schools never had such a plan. The pupils' questionnaire was also meant to respond to the question on accountability. The table below indicates pupils responses on whether broken chairs were repaired on time or not and by whom.
Table 4.14 Indicating class teachers’ responses to whether their school desks were repaired on time and who repaired the desks.

<table>
<thead>
<tr>
<th>ZONES</th>
<th>TIME</th>
<th>REPAIRER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ON TIME</td>
<td>NOT ON TIME</td>
</tr>
<tr>
<td>SABATIA WEST</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>42</td>
<td>18</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>125</td>
<td>19</td>
</tr>
<tr>
<td>TOTALS</td>
<td>204</td>
<td>58</td>
</tr>
</tbody>
</table>

The results above show that 204 pupils representing 78% said that their broken desks were repaired on time while 58 teachers representing 22% said that they were not repaired on time. On who repairs their broken desks, all the pupils who filled the questionnaires reported that all broken desks were repaired by their schools.

The research question number three sought to find out the extent to which physical infrastructure funds take into consideration inequalities in primary schools in Sabatia district. The results are presented below.

The class teachers’ questionnaire requested them to state whether there were specific funds for the construction for toilet for facilities for boys and girls. Their responses are as below.
Table 4.15 Indicating class teachers' responses to whether their school set aside funds for the construction of facilities on gender basis

<table>
<thead>
<tr>
<th>ZONE</th>
<th>AVAILABLE</th>
<th>NOT AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>36</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

The results above indicate that all the 36 class teachers representing 100% said that there were no funds set aside for the construction of facilities on gender basis. The research question number four addressed the issue of the effect of provision of funding for physical infrastructure in primary schools in Sabatia district. The Tables below present the responses of both the class teachers and the pupils who filled the questionnaire.
Figure 4.3 A Bar Graph Indicating Class Teachers' Responses to whether their School Set Aside Funds for The Construction of Facilities on Gender Basis.

Table 4.16 Class Teachers' Responses on the Effect of Funding for Physical Infrastructure

<table>
<thead>
<tr>
<th>ZONE</th>
<th>EFFECT</th>
<th>MORE TEACHERS</th>
<th>INCREASED ENROLLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td></td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td></td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td></td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>
The results above indicate that all class teachers who filled the questionnaires reported that the provision of funds for physical infrastructure led to increase in pupils' population and also led to more teachers being posted to teach the said schools. Thirty six teachers representing 100% were on the affirmative on the two issues that is more teaching staff and increase in enrollment.

The table below shows the pupils responses on whether the provision of physical facilities made them go to school. This observation supports views in : (Mabula, 2011 and Crampton, 2008).

<table>
<thead>
<tr>
<th>ZONE</th>
<th>YES</th>
<th>NO</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SABATIA WEST</td>
<td>24</td>
<td>5</td>
<td>29</td>
</tr>
<tr>
<td>SABATIA EAST</td>
<td>50</td>
<td>15</td>
<td>65</td>
</tr>
<tr>
<td>CHAVAKALI SOUTH</td>
<td>41</td>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td>CHAVAKALI NORTH</td>
<td>110</td>
<td>14</td>
<td>124</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>225</td>
<td>37</td>
<td>262</td>
</tr>
</tbody>
</table>

The results contained in the Table above show that 225 pupils representing 86% said that the provision of physical facilities encouraged them to go to school. Thirty seven pupils representing 14% said that the provision was not a factor as to why they went to school.
DISCUSSION

This study sought to answer four research questions. It employed several research methods which include use of questionnaires, discussions, and interview and observation schedules. The results got from the questionnaires are presented in Tables in part one of this chapter and explanations including discussions in this part. Again the results got from the observation and interview schedules are discussed here.

4.3 Adequacy of Physical Infrastructure Funding

Table 4.2 of this chapter shows the responses of pupils, head teachers, class teachers and the management committee pertaining the sources of funds for the physical infrastructure in their schools. All the respondents in the four categories said that C.D.F was their major source of their finances. This was further supported by the response from the interview between the researcher
and the head teachers. All the 18 head teachers representing 100% confirmed that they received most of their finances from C.D.F and F.P.E. The researcher through observation schedule yet again confirmed that most of physical infrastructure observed was identified against C.D.F. Most of the new and incomplete classes, toilets and dormitories were built through money sourced from the constituency development fund. All the 32 management committee members in the entire selected schools of Sabatia district through their discussions with the researcher indicated that C.D.F was the major financier for their physical infrastructure development and improvement in their schools. The fact that most of the primary schools in Sabatia district depended so much on C.D.F for their financial sources may be a reason as to why schools in this particular district complained of insufficient finances. On sufficiency, the interview between the researcher and the head teachers revealed that 10 of them representing 56% said that funds provided for school infrastructure development were fairly adequate while 8 of them representing 46% said that they were inadequate. The results from the observation made by the researcher revealed that out of the 15 schools observed, 5 had permanent structures while 8 were semi- permanent and the remaining 2 were plastered. Further, only 2 schools had enough toilets and 13 had toilets but not enough. The conditions of all the teaching resources as observed by the researcher were either good or fair. The researcher again found out that the two seater seats were being shared by the pupils. Three to four pupils shared a desk. Results from the discussion between the researcher and the management committee revealed that funds received for physical development of infrastructure in their schools were not sufficient. The researcher therefore confirms through the questionnaires, observation interview and discussion schedules that schools in Sabatia district lacked adequate funds for their physical development of infrastructure.
Table 4.3 in this chapter indicates the responses by the 36 class teachers pertaining sufficiency of funds for development of physical infrastructure in their schools. All the 36 class teachers representing 100% said that their schools received insufficient funds. The interview between the researcher and the 18 head teachers supports what the class teachers reported. All the 18 head teachers representing 100% said that the funds they received were inadequate. The discussions held between the researcher and the management committee members further supported the class teachers and the head teachers since all the 32 members representing 100% said that funds they received for infrastructure were not adequate. The incomplete structures in form of classes, toilets the sharing of desks by pupils, the few number of toilets as observed by the researcher confirms the assertions by all the respondents that schools in Sabatia district received inadequate funding. Table four in this chapter shows responses of the class teachers pertaining to the adequacy of classes and furniture. Twenty two class teachers representing 61% said that the two resources were fairly adequate while 14 of them representing 39% said that they were inadequate. The researcher’s observation confirmed that many pupils shared desks. Many of the schools however had fairly adequate classes contrary to what most of the respondents had said.

Table five represents the pupil’s responses concerning their comfort on classes, toilets, furniture and dormitories. On classes, 120 pupils reported that they were uncomfortable, 50 were fairly comfortable and 62 were comfortable. The fact that many pupils said that they were uncomfortable, supports the assertions by the head teachers, class teachers and the management committee members that indeed resources both physical and financial were inadequate. The pupils may have reported of their discomfort because of congestion in class, hence lack of space, enough oxygen and lack of enough desks. All these points out to the fact that schools in Sabatia
lacked enough resources. On toilets, 180 pupils reported that they were uncomfortable, 82 were fairly comfortable while no was comfortable. This report may have been as a result of the ratio of pupils and toilets which led to queuing, spending long time and toilets being dirty all the time. The congestion leading to students being uncomfortable with their toilets was also confirmed by the researcher who observed the pupils queuing in their toilets. The report by the pupils on furniture was that 51 were not comfortable, 142 were fairly comfortable and 69 said they were comfortable. This discomfort may have been as a result of three or four pupils sharing a desk meant for two pupils. The researcher again through observation confirmed that desks were shared and therefore supports the fact that many pupils were fairly comfortable. On dormitory, 18 pupils said they were not comfortable, 32 fairly comfortable while 20 were comfortable. The many pupils who reported on the negative clearly show that there was congestion, dormitories missing enough water and many other challenges leading to their discomfort. These further points to the fact that: many primary schools in Sabatia district lacked adequate funding hence inadequate physical infrastructure in form of dormitories.

Table 4.6 in this chapter presents the responses of the pupils on the type of seats they used in their schools. Out of the 262 pupils 220 of them representing 84% said that they sat on two seater desks while the remaining 42 pupils pointed out that they sat on one seater desks. These results mean that many schools in Sabatia district could not afford one seater desks showing that there were inadequate funding thus agreeing with what the management committee members, head teachers and class teachers said. Many schools in this district may have opted for two seater seats because of spacing in the classes again showing that they had no funds to construct many or large classes. Table seven presents the report by the pupils on the adequacy of funding in their
schools. One twenty pupils said they were adequate, 92 said they were fairly adequate while 50 said they were adequate. Their report agrees with what the other respondents said.

Table 4.8 shows the results by class teachers on the type of seats they had in their schools and whether spacing was enough in their classes were enough or not. Thirty teachers representing 83% said that they had two seater desks while 6 of them representing 17% reported that they had one seater desks. This is a confirmation of what the pupils said in their questionnaire. On spacing 20 teachers said that spacing in their classes was enough while 16 said that it was not enough. This agrees with what the other respondents said since the lack of enough space signifies that classes were small and or few showing that funds were inadequate.

The last Table on adequacy of resources gives the class teachers responses on their satisfaction towards the general condition of physical infrastructure. Six teachers said that they were satisfied, 14 were fairly satisfied while the remaining 16 were not satisfied. This table concludes and confirms that resources both physical and financial were not adequate in most of the primary schools in Sabatia district.

4.4 Accountability of Physical Infrastructure Funding

Objective two of this study sought to find out whether there was accountability on the way funds received were being used. Table ten shows the class teachers responses. Twenty two teachers representing 61% said that they were shown while 14 of them said that they were not. The interview between the researcher and the 18 head teachers supports the class teachers' assertion. All the 18 head teachers who were interviewed said that they were transparent on the way funds
received were used. Further, the discussions held by the researcher and the management committee members confirmed this transparency as all the 32 management officers representing 100% said that they were transparent. Table 11 shows class teachers’ responses on whether received funds were well used. Twenty three teachers were on the positive whereas 13 were on the negative. On whether class teachers were satisfied on how accountability was being done, 4 said they were very satisfied, 18 were satisfied.

While 14 said that they were dissatisfied. The discussions and the interview between the researcher and the head teachers support the above responses by the class teachers. All the head teachers and the management committee members said that they were satisfied. The observation made by the researcher yielded the same results as said by the other respondents. The researcher found out that there were displays of how funds were used in notices within all the schools he observed. He was also able to see receipts, cheque books and payment vouchers. Again, on accountability the pupils were requested to show who repaired their broken desks and to indicate whether they were repaired on time or not. All the 262 pupils reported that their desks were repaired by their respective schools. Two hundred and four pupils representing 78% said that broken desks were repaired on time while 58 pupils representing 22% said they were not. Basing the conclusion on the above responses by the class teachers, head teachers, management committees and the pupils, the researcher can safely say that there is proper accountability of funds in primary schools in Sabatia district.
4.5 Equitable Distribution of Funds Based on Gender and Needy Children

Objective three of this study sought to find out whether funds were distributed basing it on gender or the needs of pupils with special needs in schools. The class teachers’ questionnaire requested them to state whether there were funds meant specifically for the construction of toilet facilities for boys and girls. All the 36 class teachers representing 100% said that funds were not spent basing it on gender. Again all the teachers said that there was no specific funding of physical infrastructure for pupils with special needs. The report by the teachers was yet again supported by the head teachers’ responses in the interview between them and the researcher. The 18 head teachers representing 100% said that there was no special vote head for a specific gender. They further reported that there was no funding of physical infrastructure for pupils with special needs. The discussions between the researcher and the management committee officers yielded the same results as all of them said that funding was not based on gender and that there was no funds to fund physical infrastructure for pupils with special needs. This was observed by, Theunynck, (2003).

4.6 Effect of Provision of Funding for Physical Infrastructure

The class teachers’ questionnaire requested them to indicate enrolment trends in their schools between 2005 and 2010. Their responses showed fluctuations. On being asked to give a reason as to why there were fluctuations, all the 36 teachers representing 100% said that it was due to availability of funding for physical infrastructure. All of them agreed that more funding led to increase in enrolment and vice versa. This agrees with studies by: Crampton, et al, 2003, 2008, AFT, 2008 and Carr Hill, 2009. The questionnaire again requested them to indicate the funding of physical infrastructure had on staffing stability. All the 36 of them reported that more funding
meant more enrolment of pupils hence more teachers being posted to their schools. The interview between the researcher and the head teachers showed that all the 18 of them representing 100% supported what the class teachers said. All the head teachers were in agreement that more funding led to increased enrolment, better grades and staffing stability. The head teachers again were requested in the interview to give reasons why some of their pupils transferred to other schools. All of them said that the class teachers concerns were lack of enough physical infrastructure. It can therefore be concluded that enough funding for physical infrastructure in Sabatia district primary schools led to more enrolment, more teachers and better performance by pupils. This finding agrees with (Mabula, 2011) view about effect of improved infrastructure on learning outcomes.

4.7 Summary of the Findings

1. Primary schools in Sabatia district do not have enough funding for physical infrastructure.
2. There is proper accountability of funds disbursed for physical infrastructure development in primary schools in Sabatia district.
3. There are no funds specifically meant for a specific gender and pupils with special needs.
4. Provision of enough funds for physical infrastructure leads to increase in pupils’ enrolment, staffing stability and better grades by pupils in Sabatia district primary schools.
CHAPTER FIVE
DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 Introduction
This chapter deals with the discussion of the findings of this study, provides conclusions, recommendations and suggestions for further research.

The study aimed at examining the effectiveness of physical infrastructure funding in public primary schools in Sabatia district. To achieve this, the researcher used the following questions.

a) What was the level and adequacy of physical infrastructure funding to primary schools?

b) How accountable was primary school infrastructure funding?

c) To what extent did school physical infrastructure funding take into consideration inequalities?

d) To what extent did school physical infrastructure funding affect the schools educational achievement?

5.1 Adequacy of Physical Infrastructure Funding
In this study, it was found that the sampled schools had inadequate funding for physical infrastructure. This was achieved through the use of questionnaires, interview and observation schedules. Many schools in Sabatia district relied much on CDF for funding their physical infrastructure. According to Crampton and Thomson (2003), no study of school funding is complete without a deep concern for the role of physical infrastructure in schools. Every investment must Endeavour to be effective. The national commission on excellence in education capacity research practicum and policy makers NCEECRPP, (1983) recognized that building education capacity was necessary precondition for sustained educational improvement. According to the commission, educational capacity includes: human, social, physical and fiscal
resources needed in schools to achieve educational goals. For the above to be achieved, schools should receive enough funding. Schools in Sabatia district in this study reported of insufficient funding. This study therefore recommends that’s primary schools in Sabatia district should stop over relying on CDF and FPE but instead look for other sources to meet their needs in terms physical infrastructure.

5.2 Accountability of Physical Infrastructure

The provision of funding for physical infrastructure in schools is incomplete without proper accountability. Once resources have been availed, steps should be taken to ensure efficient use of these resources and accountability. The Kenya government came up with specific guidelines on accountability and use of KESSP funds. This is contained in two manuals: Kenya Education Sector Support Programme Technical Handbook & Kenya Education Sector Support Programme Management Handbook. These manuals support the school management handbook that provides complimentary guidance on the organizational framework relevant for developing and forming the school infrastructure committee as well as managing the entire implementation process. This study found that there was proper accountability in all the primary schools in Sabatia district. All the principals and the management committees confirmed the presence of accountability. The researcher further confirmed the presence of receipts, cheque books payment vouchers through the observation schedule. It was thus clear that accountability of funds in all the primary schools in Sabatia district was proper.
5.3 Equitable Distribution of Funds based on Gender and Needy children.

The Kenya government recognizes that there are learners with special needs. It also recognizes that depending on the gender of a school, their needs may vary. It is in light of this that the ministry of education came up with a safety standards manual for schools. The manual requires that all buildings constructed should be accessed by all learners including those with special needs like the physically challenged. It further states that in mixed schools, girls’ sanitation facilities must be separate and offer complete privacy. This study sought to find out whether there were funds specifically for the construction of facilities based on gender and children with special needs. The research found that there were no funds meant for use in coming up with physical infrastructure for a given gender and children with special needs.

5.4 Effects of Provision of Funds for Physical infrastructure

Infrastructure funding has a direct effect on the condition of a school. It can either affect it positively or negatively. A survey conducted in New York found that after controlling demographics, students at schools with the best facilities performed better on standardized tests than schools with the worst facilities. The Kenya government recognizes the fact that infrastructure should combine and relate well with other inputs to achieve the goals of education. The aim of this research was to find out whether the provision of funds led to increased enrollment, staffing stability and better performance by the pupils. The researcher, using different methods of data collection confirmed that more funding to schools for physical infrastructure meant more classes, big and well build dormitories, more toilets and several other facilities. The increase in the above facilities in turn led to more teachers being posted to the said schools to teach the many pupils who enroll there. The researcher further confirmed that there were better performances by pupils in schools with the best facilities.
5.5 Conclusion

As a result of the findings of this study, it can be concluded that primary schools in Sabatia district lacked adequate funding for physical facilities. Further, schools in Sabatia district had a well laid down procedure of accountability. The findings also confirm that there were no funds specifically meant for developing physical facilities on gender grounds and needy children. Lastly, the research confirms that provision of funds for physical infrastructure led to increased enrollment, staffing stability and improved performances by pupils learning in institutions with the best facilities.

5.6 Recommendations

1. All primary schools in Sabatia district should stop over relying on CDF and FPE as their sources of funding for their physical infrastructure development.

2. Primary schools in Sabatia district should start income generating activities to increase their sources of funds.

3. There is need for school management committees to set aside funds to be used for developing physical infrastructure for the needy pupils and

5.7 Suggestions for Further Research

1. A similar study should be conducted in other districts, which may not have similar conditions like Sabatia district for comparative purposes.

2. A specific aspect of infrastructure funding like: equity, adequacy and accountability should be studied in the same or a different district.
REFERENCES


Primary Education Development Plan (PEDP) United Republic of Tanzania. Education section development plan (2002-2006)


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Theunynck, Serge (2003). Determinants of Primary Education Outcomes in Developing Countries. World Bank: Washington, DC.


APPENDIX I
PUPILS QUESTIONNAIRE

Dear, the researcher is a post-graduate student at Kenyatta University. He is seeking information on equity, adequacy and accountability of physical infrastructure funding in schools in Kenya. Please read the instructions for each question. You are assured that the information you give will be treated confidentially and will be used for the purpose of the research ONLY.

Part one: General information

1. Name of the school .........................................................

2. Zone ........................................................................

3. Class ........................................................................

4. Gender
   Boy □ Girls □

5. Type of school
   Boarding □ Day □

Part two: Questionnaire on adequacy of physical facilities

1. There various sources of funds for physical infrastructure in this school. According to you, where does the money used to build or repair the following structures come from?
   (Tick as appropriate)

   Physical facilities    Source
   (a) Classes
   (MP) CDF □ GOVT □
   FEES □ DONORS □

   (b) Water point/Tank
   (MP) CDF □ GOVT □
   FEES □ DONORS □
(c) Toilets

(MP) CDF  □  GOVT  □
FEES  □  DONORS  □

(d) Furniture

(MP) CDF  □  GOVT  □
FEES  □  DONORS  □

(a) When your desks break who repairs them?

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

(b) Are they repaired in time?

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

3. Do you find yourself overcrowded in class?

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

If yes what has lead to this?

4. Do you face any problems with your toilets?

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

If yes list them

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

5. (a) Do your toilets have means of locking from inside?

..........................................................................................................................
6. Has the availability of physical facilities contributed to your coming to school? ...

In what way? ...

7. How comfortable are you with the following:

(Tick as appropriate)

(a) Classes

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>☐</td>
</tr>
<tr>
<td>Comfortable</td>
<td>☐</td>
</tr>
<tr>
<td>Fairly comfortable</td>
<td>☐</td>
</tr>
<tr>
<td>Not comfortable</td>
<td>☐</td>
</tr>
</tbody>
</table>

(b) Toilets

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>☐</td>
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<tr>
<td>Comfortable</td>
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<tr>
<td>Fairly comfortable</td>
<td>☐</td>
</tr>
<tr>
<td>Not comfortable</td>
<td>☐</td>
</tr>
</tbody>
</table>

(c) Furniture

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>☐</td>
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<tr>
<td>Comfortable</td>
<td>☐</td>
</tr>
<tr>
<td>Fairly comfortable</td>
<td>☐</td>
</tr>
<tr>
<td>Not comfortable</td>
<td>☐</td>
</tr>
</tbody>
</table>

(d) Dormitory

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>☐</td>
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<tr>
<td>Comfortable</td>
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<tr>
<td>Fairly comfortable</td>
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</tr>
<tr>
<td>Not comfortable</td>
<td>☐</td>
</tr>
</tbody>
</table>

8. Can a teacher access all students in class? ...

If not, why? ...
APPENDIX II

CLASS TEACHERS QUESTIONNAIRE

Dear teacher, the researcher is a post-graduate student at Kenyatta University. The questionnaire consists of various questions. Please read the instructions for each question. You are assured that the information you give will be treated confidential and will be used for the purpose of the research ONLY.

Part one: General information

1. Name of the school

2. Zone

3. For which class are you a class teacher

Part two: Questionnaire adequacy

1. What is the source of funds for physical infrastructure in your school?
   - CDF
   - LATF
   - DONORS
   - KESSP
   - OTHERS

2. Do these provide sufficient funds for school physical infrastructure?

3. How would you rate the adequacy of the physical facilities? (Tick appropriately)
   - (a) Class
     - Very adequate
     - Adequate
     - Fairly adequate
     - Not adequate
(b) Furniture

Very adequate □
Adequate □
Fairly adequate □
Not adequate □

4. When pupils go to the toilets do they overstay there? .................................................................
If yes what contributes to this? ..............................................................................................................

5. (i) What type of desks are in your class? One seater □ Two seater □
(ii) How many pupils share a desk? ........................................................................................................

6. Do you have any pupils with special needs? Yes □ No □

7. How satisfied are you with the general condition of the school physical infrastructure? ............

8. What do you feel about the level of funding for physical infrastructure in school?

Tick as appropriate □
Very adequate □
Adequate □
Fairly adequate □
Not adequate □
Part Three: Questionnaire on Accountability

1. Does your school show how funds for physical infrastructure are used?

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

If yes, in what way?..........................................................................................................}

2. What effect does accountability have on school physical infrastructure?

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

3. Do you think the school is utilizing well the money disbursed to it (if any) in enhancing its infrastructure?

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

4. Are you aware about measures to enhance accountability? For example, availability of school infrastructure committee (SIC) and school infrastructure development plan (SIDP)

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

What other measures are there to enhance accountability?........................................................................................................................................

5. How satisfied are you with the way accountability is done.

Tick as appropriate

Very satisfied [◲]  
Satisfied [ ]  
Not satisfied [ ]

6. Do you think there is another way the funds can be accounted for?..........................
Part Four: Questionnaire on Equity

1. (a) Are there any funds specific for construction of toilet facilities for boys and girls...if yes which ones?

   (b) How available are they for each gender?

2. (a) Do you have any other specific funding of physical infrastructure for any pupils with special needs?...

   b. Approximately what percentage of physical infrastructure funding is available for learners with special needs?...

   a. How satisfied are you with such a provision?

   b. How is the daily attendance of girls affected by the availability of physical facilities?

   c. How are people with special needs affected by the availability of physical infrastructure funds?
APPENDIX III

HEADTEACHERS INTERVIEW SCHEDULE

The researcher is a post-graduate student at Kenyatta University. This questionnaire consists of various questions. Please read the instructions for each question. You are assured that the information you give will be treated confidentially and will be used for the purpose of the research ONLY.

Part 1: General information

1. Name of the school

2. Zone

Part 2: Interview on Adequacy

1. What are the sources of physical infrastructure for your school?
   a) KESSP
   b) CDF
   c) FPE
   d) Donors
   e) Others

2. a) School enrolment

   2005
   2006
   2007
   2008
   2009
   2010
b) With the above enrolment what amount of funds was required to adequately cater for school physical infrastructure needs for this enrolment?

c) Approximately, what percentage of the above is provided by the following?

(i) Government
(ii) Donors
(iii) LATF
(iv) CDF
(v) Others

d) How adequate are funds provided for school physical infrastructure funding?

Tick appropriately

Very adequate
Adequate
Fairly adequate
Not adequate
Part 3: Interview on Accountability

1. a) Does your school have a School Infrastructure Committee? And a school infrastructure development plan? If yes have they undergone the necessary training on accountability?

b) What is their composition?

2. Have you been able to successfully implement the guidelines on accountability by having the necessary records or documents indicating accountability?

3. Have you been able to isolate school physical infrastructure depending on the financier?

4. How often is the auditing of physical infrastructure funds done in the school?

5. Is there a check list that is used during that auditing?
Part 4: Interview on Equity

1. Is there a special vote head for a specific gender? If yes approximately what percentage?

2. a) Are there any funds specific for construction of physical infrastructure for a specific gender? If yes which ones?

b) How available are they for each gender?

c) How do you make sure the facilities are used for the specified gender?

3. a) Do you have funding of physical infrastructure for any pupils with special needs? How is this done?

4. Approximately what percentage of physical infrastructure funding is available for learners with special needs?
Part 5: Interview on Education Achievement

1. What are the enrolment trends in your school between 2005 and 2010?
   a) Number of pupils in 2005
   b) Number of pupils in 2006
   c) Number of pupils in 2007
   d) Number of pupils in 2008
   e) Number of pupils in 2009
   f) Number of pupils in 2010

2. How has the availability of physical infrastructure affected the school educational achievement?

3. To what level does physical infrastructure funding help in staffing stability?

4. a) Have you had any pupils dropping out in your school this year?
   if yes how many?
   b) What are the reasons for their dropout?

5. What concerns do teachers express about the conditions of infrastructure?
6. What do you think is necessary for improvement?
APPENDIX IV

SCHOOL MANAGEMENT COMMITTEE FOCUS GROUP DISCUSSION

The researcher is a post-graduate student at Kenyatta University. He seeks information on adequacy, equity and accountability of physical infrastructure funding. You are assured that the information you give will be treated confidentially and will be used for the purpose of the research ONLY.

1. a) Indicate if you are a parent in the school...

b) What is your position in the school management committee?

2. How many children do you have in the school?

3. What are the sources of school infrastructure funds?

4. According to you, does this cover the requirements for physical infrastructure needs in your school?

If not, how do you cater for the financial gap?

---

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5. How adequate is the amount of funds available for physical infrastructure?

6. a) In what ways do you ensure equity in the distribution of physical infrastructure funds amongst pupils in the school?

b) What measures have been put in place to enhance accountability in your school?

c) Are they adequately working?

d) Do you have a school infrastructure committee and the school infrastructure development plan?

e) Are funds ear-marked for school physical infrastructure used for that purpose?

What records show this?
APPENDIX V

OBSERVATION SCHEDULE ON SCHOOL INFRASTRUCTURE AND
LEARNING FACILITIES

Part 1: Observation and adequacy

The observer will observe the following:

Physical facilities

(a) Type and condition of classes, toilets, furniture, library and labs

i. Are they permanent? Yes □ No □

ii. Semi-permanent? Yes □ No □

iii. Painted? Yes □ No □

iv. Plastered? Yes □ No □

Are they clearly illuminated?

v. Are there adequate toilets? Yes □ No □

vi. Do you have separate facilities for boys and girls? Yes □ No □

vii. How many?........................................................................................................

(b) Condition of teaching and learning resources

i. Furniture............................................................................................................

ii. Desks .................................................................................................................

iii. Table ...................................................................................................................

iv. Black wall .........................................................................................................

89
(c) Condition of classes

i. Roofed .................................................................

ii. Doors and windows ................................................

iii. Type of the floor ...................................................

   Permanent  ☐  Semi-permanent ☐

iv. Seating arrangement .............................................

(d) Condition of libraries

Part 2: Observation of accountability of physical infrastructure funding

1. Availability of accountability documents like books of accounts? ....................
   If yes which ones ..................................................
   ...........................................................................
   ...........................................................................
   ...........................................................................

2. Availability of school improvement programme management handbook and school infrastructure technical handbook?
   ...........................................................................
   ...........................................................................
   ...........................................................................
   ...........................................................................

3. Can you identify the physical facilities in school be identified according to the financier?
   ...........................................................................

4. Is there a school infrastructure development plan? ..............................................
   ...........................................................................
5. (a) Is there any minute book and school infrastructure improvement file to support the same?
(b) Which information is in the school infrastructure improvement file?

6. Checklist to show that (SIM) are maintaining the overall management process and community consultations
(a) Delivery notes
(b) Invoice

7. Audit file trial balance

Part 3: Observation on Equity

1. Are there any special facilities constructed to cater for the specific gender needs?
   a) Classes
   b) Library
   c) Toilets

2. Can the physical facilities be accessed by people with disabilities?

3. To what extend are the facilities able to be accessed by all gender?
Part 4: Observation on educational achievements

1. Availability of quality school physical infrastructure

2. Evidence showing improvement of staff levels or less staff turnout

Enrolment trends in school between 2005-2010

a) Number of pupils in 2005

b) Number of pupils in 2005

c) Number of pupils in 2005

d) Number of pupils in 2005

e) Number of pupils in 2005

f) Number of pupils in 2005

4. Cases of absenteeism between 2005 and 2010. Have they increased, fluctuated or decreased?

5. Integration of learners or ability to integrate learners who are physically challenged.

How has it been done?
APPENDIX VII

Map of Vihiga County
APPENDIX VI II

Research permit

THIS IS TO CERTIFY THAT:

Prof. Dr. / Mr. Mrs. Miss / Institution

Samuel Ngara

of Address: Kenyatta University, P.O. Box 43842-00180, Nairobi,

has been permitted to conduct research in

Location: Sabata

District: Western

Province:

on the topic: Effectiveness of physical infrastructure funding in public primary schools

In Sabata District, Vihiga County,


Research Permit No.: NCST/REG/14/012/154

Date of issue: November, 2012

Fee received: KSH. 1,000

Applicant: Signature: Secretary: National Council for Science & Technology
## APPENDIX VI

### BUDGET

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<th>Item</th>
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</tr>
<tr>
<td>Photocopying and binding</td>
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</tr>
<tr>
<td>Transport and subsistence</td>
<td>40,000</td>
</tr>
<tr>
<td>Stationery and copy preparation</td>
<td>50,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>170,000</strong></td>
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