LEVEL OF ATTAINMENT OF THE SECOND MILLENNIUM DEVELOPMENT GOAL ON EDUCATION AT PRIMARY SCHOOLS IN HOMA-BAY COUNTY, KENYA

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DECLARATION

The research project is my original work and has not been presented for the award of degree in any other university.

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DEDICATION

I dedicate this project to my dear wife Eunice and my mother Penina. I can't also forget my brothers George, Gordon and Evans as well as my sisters Linet and Diana and also my sons Daniel, Collins, Felix and Moses as well as daughters Nancy, Liz, Sharon and Whitney.

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ABBREVIATIONS AND ACRONYMS

- AfDB- African Development Bank
- AIDS- Acquired Immunodeficiency Syndrome
- ASAL- Arid and Semi Arid Lands
- **CBD** Central Business District
- CIDP- County Integrated Development Plan
- ECCE- Early Childhood Care and Education
- **EFA** Education For All
- **FPE-** Free Primary Education
- **GPI-** Gender Parity Index
- **GRR** Grade Retention Rate
- HCDT- Human Capital Development Theory
- HIPC- Heavily Indebted Poor Countries
- HIV- Human Immunodeficiency Virus
- IMF- International Monetary Fund
- KESSP- Kenya Education Sector Support Program
- **KNBS** Kenya National Bureau of Statistics
- MDGs- Millennium Development Goals
- MoEST- Ministry of Education Science and Technology
- NACOSTI- National Commission for Science, Technology and Innovation
- **NER-** Net Enrollment Rate
- **ODA-** Official Development Assistance
- **OSSAP-** Office of the Senior Special Assistant to the President
- **SDA-** Social Demand Approach
- **SDGs** Sustainable Development Goals
- TSC- Teachers Service Commission
- **UBE-** Universal Basic Education
- UNESCO- United Nations Educational, Scientific and Cultural Organization
- UNICEF- United Nations International Children Emergency Fund
- **UPE-** Universal Primary Education

ABSTRACT

This study was aimed at finding out the level of attainment of the second millennium development goal in education at primary schools in Homa-Bay sub-county in Homa-Bay county, Kenya. The objectives were as follows; to determine the enrollment rates, by gender, of pupils in primary schools in relation to the second MDG threshold in Homa-Bay sub-county, to determine the overall enrollment rate of pupils in primary schools in relation to the second MDG threshold., to calculate the weighted average cohort retention rates of pupils at standard 5 from 2010 to 2015 in public primary schools compared to the second MDG target as well as to examine the available educational resources in primary schools needed to achieve second MDG. The study adopted descriptive survey research design. The study targeted all the 142 public primary schools in Homa-Bay sub-county. The sampling technique that was used in this study was cluster random sampling in which schools were first of all categorized into four political administrative or wards (clusters) made up of Arujo ward, Homa-Bay Central ward, Homa-Bay West ward and Homa-Bay East ward. The study utilized both primary and secondary data. Primary data was gathered through questionnaires, while secondary data was obtained from published documents and materials including journals, periodicals, magazines and published reports. Data was analyzed using both descriptive and inferential statistics. Data was then presented using tables and figures. Major finding was that there are large disparities still evident in primary schools in terms of enrollment and retention and the poorest and most disadvantaged children such as girls bore the heaviest burden of being left out of school enrollments. The study concluded that Homa-Bay sub-county has not fully attained the second millennium development goal on education at primary schools. Major recommendation were that the county government of Homa-Bay should implement the MDG policy requirements and promote incentives such as free lunch, uniforms, free text books and transportation to encourage school enrolment and retention rates and to adopt strategies that will continue to ensure that children enroll and stay in schools, especially in poverty-stricken areas within the sub-county.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The year 2015 was to mark the end for the Millennium Development Goals (MDGs) as a new set of Sustainable Development Goals (SDGs) was rolled out (UNESCO 2015). As the MDG chapter was being closed and a new set of development agenda was rolled out, it was imperative to carry out an evaluation study on the ground to find out whether or not such objectives touching on education were achieved. The research therefore attempts to dig into Homa-Bay Sub County in Homa Bay County to evaluate the extent of attainment of this goal on education as the MDG chapter is closed so that it may keep pace with the new world development agenda on Sustainable Development. The second Millennium Development Goal on education had an aim to achieve Universal Primary Education (UPE) by 2015 (UNESCO 2002). The global concept of UPE was restricted to primary education while in the Kenya's point of view, it was expounded to include basic education encompassing two years of ECCE, primary for eight years and four years of secondary education. As a result, the global UPE was redefined to be Universal Basic Education (UBE) by the government of Kenya (MoEST 2003).

Educating children was to give the succeeding generation the tools to fight poverty (ultimate goal of MDGs) and diseases like malaria and HIV/AIDS. In other words, investment in education was to give firm bed rock upon which other MDGs could be realized (Bruns & Mirigat 2003). In particular, primary education created the foundation for high quality skills development in literacy and numeracy which were very

fundamental in science and technology (MDG report 2012). Education for girls and boys was to be a preventive weapon against HIV/AIDS. In addition, education for girls also yielded many socio-economic gains such as better economic productivity, higher family incomes, late marriages as well as reduced fertility (MDG report 2012).

Countries in response to these many benefits associated with education started to give priority to education and hence instituted policies that could ensure the achievement of this goal. There was a remarkable improvement in enrollment in primary schools worldwide between 2000 and 2015 (MDG report 2015). The aggregate net enrollment for Africa rose from 64 percent in 2000 to 80 percent in 2009. Sub Saharan Africa had the best record enrollment from 60 percent in 2000 to 88 percent in 2015. Most African countries had a net enrollment ratio (NER) exceeding 90 percent by 2012. Tanzania increased budgetary allocations and also introduced Primary Education Development Plan and therefore hit the MDG target in net enrollment in primary schools of over 95 percent just like Algeria, Burundi, Egypt, Togo and Tunisia which had similar policies. Namibia enshrined compulsory education into their constitution, Rwanda introduced a 9year cycle of compulsory basic education and Seychelles eliminated all forms of discrimination and as a result their retention rates improved tremendously and almost achieved gender parity in education of about 98 percent. Zambia launched the program for advancement of girls' education and therefore attained a net enrollment rate of 94 percent by 2015 and also attained gender parity index of one just like Guinea, Benin and Chad that also had strong advocacy for girl child education in their education system (EFA Global Monitoring Report 2012).

Kenya made basic education compulsory, introduced Free Primary Education(FPE) in 2003 as well as enshrined compulsory basic education in the Constitution 2010 and The Bill of Rights No. 14 in the Basic Education Act of 2013 (MoEST 2013).The total enrollment in Kenya moved from 6.1 million in 2000 to 7.4million in 2007 to 10.2 million in 2013 (MoEST report 2014).Kenya had a good record in grade five retention rate of 90.11 percent in 2003 to 91.6 percent in 2006 to 98.2 percent in 2014(Kenya education statistic booklet 2014). Kenya also made a good progress in terms of school infrastructure development such as classrooms, improved water supply as well as electricity through Kenya Education Sector Support Program (KESSP).

The data samples given however show that UPE was not achieved fully in Kenya, with certain parts being disadvantaged. In urban slums, many children ended up being in overcrowded places as well as poorly resourced and low fee private schools. Besides, for many nomads, school was often held under trees with no books and pens. In Homa-Bay Sub-county, the net enrollment in primary schools dwindled at 88.7 percent while the county average net enrollment had hit 92.9 percent by 2013. Similarly the literacy rate in this sub-county was 64 percent with males accounting for 66 percent while females accounting for 54 percent thereby manifesting high degree of disparity in terms of gender (KNBS 2013). It is therefore evident that UPE is still a challenge even though 2015, the target year, is behind us. The realization of UPE still requires that we must continue to address issues of enrollment, gender inequality in education, retention rates as well as educational resources in these schools. As the world represses on the MDGs and embraces Sustainable Development Goals (SDGs) and as Kenya edges towards Vision

2030, it is imperative that it addresses the above parameters, if UPE were to be of any necessity as a means of fighting poverty in the post MDG agenda (MDG report 2015).

1.2 Statement of the Problem

The ultimate aim of the Millennium Development Goals (MDGs) was to eliminate poverty across the world by 2015, a vision that was translated into eight MDGs (UNESCO 2000). Education was envisaged to play a significant role as a basis upon which other MDGs would be realized and hence the need to invest in it (Bruns and Mirigat). Primary school education in particular gives a foundation for later skill developments in numeracy and literacy which would be very important in science and technology (MDG 2012). It was envisaged that all the MDGs as declared at the New York conference would be implemented in full by 2015 upon the successful attainment of the second MDG on UPE aimed at achieving net enrollment of 95 percent or above, gender parity index of one or more as well as grade five retention rate of 95 percent or above (MDG 2003).

In an attempt to make this vision and the basic right of all children operational, the government of Kenya introduced free and compulsory primary education in 2003. In addition, school feeding programs as well as affirmative action measures were instituted (Abagi 2009). These policy initiatives were introduced to help increase enrollments, improve retention and completion rates of pupils in schools, a move that would eventually witness the realization of UPE by 2015. The move was also to cushion parents of poor households so that their children could go to school by abolishing fees.

There were great achievements in terms of enrollment in primary schools and gender parity in education after the primary education was made free in 2003 (MoEST 2015). The county government of Homa-Bay also made efforts within to ensure this goal by sustaining the school feeding programs, intensified school inspection mechanisms as well as completion of classrooms hitherto under AfDB. These policy initiatives witnessed a net enrollment increase from 77.3 percent in 2002 to 92.9 percent by 2013 in Homa-Bay county as well as gender parity index of 0.97 (KNBS 2013).

Despite the many significant achievements made on many of the MDGs targets by 2015 worldwide, the progress was uneven across Homa-Bay County leaving remarkable gaps. In Homa-Bay Sub-county, the net enrollment in primary schools stagnated at 88.7 percent while the county average net enrollment had hit 92.9 percent by 2013 (KNBS 2013). Similarly the literacy rate in this sub-county was 64 percent with males accounting for 66 percent while females accounting for 54 percent thereby manifesting high degree of disparity in terms of gender. The report further noted that 10.4 percent of the school age children were out of school with highest dropout rate at 28 percent in Homa-Bay Subcounty cutting across both boys and girls which was attributed to high poverty levels as well as regular famine more particularly during seasons when Lake Victoria was infested by water weeds (annual report 2013). According to this same report, the number of street children of the primary school going age in Homa-Bay Sub-county was relatively higher compared to those of the other sub-counties within the county in which a number of whom were found just selling polythene bags in the market as well as roaming within the county's CBD. According to KNBS of 2013 on Homa-Bay, it was noted that there was

inadequacy of at least two teachers for each primary school while the sub-county's average inadequacy stood at 2.6 teachers for every primary school. It is in view of these that the research sought to evaluate the extent to which the second millennium development goal had been attained so that necessary steps would be taken to cope with the rest of the other sub-counties on second MDG even as a new vision on Sustainable Development gains momentum.

1.3Purpose of the Study

The purpose of this study was to evaluate the extent to which the Second Millennium Development Goal on education had been achieved at primary schools in Homa-Bay Sub-County in Homa- Bay County

1.4 Objectives of the Study

The objectives of the study were as follows:

- To determine the enrollment rates, by gender, of pupils in primary schools in relation to the second MDG threshold in Homa-Bay sub-county
- ii) To determine the overall enrollment rate of pupils in primary schools in relation to the second MDG threshold.
- iii) To calculate the weighted average cohort retention rates of pupils at standard 5 from 2010 to 2015 in public primary schools compared to the second MDG target.
- iv) To examine the available educational resources of pupils in primary schools needed to achieve second MDG.

1.5 Research Questions

The research questions for the study were:

- i) What is the gender parity index in the enrollments of pupils in primary schools in Homa-Bay Sub-County in relation to the second MDG threshold?
- ii) What is the overall enrollment rate of the pupils in primary schools in Homa-Bay sub-county as compared to the MDG minimum?
- iii) What is the weighted average retention rate of pupils in grade 5 in the primary schools in Homa-Bay sub-county in relation to MDG threshold?
- iv) What are the available educational resources in Homa-Bay sub-county towards achieving the second MDG?

1.6 Significance of the Study

The study aimed at evaluating the extent of achievement of the Millennium Development Goals in education at primary schools in Homa-Bay Sub-county. From the findings this study, both the national and county government would step up measures towards implementing affirmative action initiatives and also enacting further policies to ensure no children, especially girls, are left behind in the provision of basic education.

1.7 Limitations of the Study

The following are the problems that were encountered during the process of research and the ways they were mitigated: the fear factor among some head-teachers to openly give accurate data of the school due 'unforeseen perceived consequences' regarding the same. This was mitigated by confessing the exclusive research purpose of the project. The scattered orientation of most schools within the sub-county especially those in rural settings as well as the presence of dry weather roads which took a longer time and money to move from one place to another. This was mitigated by properly allocating enough money and time to visit such schools as well as hiring 'bodaboda'

1.8 Delimitations of the Study

This research was delimited to the second MDG on basic education which is considered fundamental towards achieving other MDGs. The study was also done in Homa-Bay Sub-County which by virtue of being the headquarter of Homa-Bay county ought to set pace for the other seven sub-counties in the county in terms of development as well as service delivery to its population and yet lagged in the same as the reports so indicated under the background.

1.9. Basic Assumptions of the Study

- i) Homa-Bay Sub-County had responded to the Millennium Development Goals by meeting the threshold on basic education at primary levels.
- ii) Both the National and county government of Homa-Bay county supported the basic education at primary levels, both in terms of finance and infrastructure that could have ensured the achievement of the MDGs in Homa-Bay Sub-County.
- iii) There were no cases of repetitions in the primary schools owing to the government policy on education then.

1.10 Definition of Significant Terms

The following terms were defined as follows:

Basic Education

Basic education is any education system carried out below the tertiary level and includes Early Childhood Care and Education(ECCE), preschool, primary and secondary education.

Bodaboda

Motorcycles used as taxis to ferry people and goods especially in remote places of the countryside and towns.

Educational Resources

The human, physical, financial as well as the teaching resources requirement in a school to accommodate the pupils in the school for delivery of educational service

Gender Parity Index

Refers to the ratio of boys to girls enrolled in a particular level of schooling and measures the level of disparity in education by gender

Level of Attainment

This refers to the degree to which a said goal has been achieved.

Millennium Development Goals

These were the development goals which were to act as a framework for world's development for a period of 15 years.

Net Enrollment Rate

The proportion of children of the official primary school age who enroll in primary education to the aggregate population of children of official primary school age expressed as a percentage.

Sustainable Development

Is an economic development that is carried out without depletion of natural resources.

Weighted Average Retention Rate

The mean proportion of cohort of pupils enrolled in a certain grade and stay in school up to a given higher grade.

1.11Organisation of the Study

The study was organized into five chapters which were: Chapter one comprising of introduction with sub chapters as background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitation of the study, basic assumptions of the study, definition of significant terms and organization of the study. Chapter two was literature review and sub chapters were introduction, status of study objectives, summary of the reviewed literature, theoretical framework and conceptual framework. Chapter three was research methodology and sub chapters were research design, target population, sample size and sampling techniques, research instruments, validity of the research instruments, reliability of the research instruments, data collection procedures, data analysis techniques and finally ethical considerations. Chapter four contains data presentation, interpretation and discussion and finally chapter five includes summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter contains a review of the related literature on the level of attainment of the MDGs in education in primary schools both globally and nationally. These include overview of the MDGs, the concept of UPE, review of literature related to the study variables, summary of the reviewed literature, the conceptual framework and finally the theoretical framework.

2.2 Overview of the Millennium Development Goals

The Millennium Development Goals (MDGs) were internationally accepted standards for measuring progress towards ensuring zero poverty level in the world. They were agreed upon at the UN Millennium Summit in 2000 where world leaders agreed to 'free all men, women and children from the abject and dehumanizing conditions of extreme poverty'. (UNESCO 2000).

Each of these goals had particular targets and goals for realizing them. To hasten the progress, the G8 finance ministers agreed in June 2005 to provide adequate funds to the World Bank (WB), International Monetary fund (IMF) and the Africa Development Bank (AfDB) to write off \$40 to \$55 billions in-debts owed by members of the Heavily Indebted Poor Countries (HIPC). This was to enable them redirect resources to programs of enhancing health and education as well as alleviating poverty (UNESCO 2005). Furthermore, upon putting into consideration the special needs of Africa, the Millennium

Declaration called on UN member states to support the search for democracy in Africa. They also agreed to assist Africans in their fight for perpetual peace, poverty alleviation and sustainable development. These states were to take measures to address challenges of poverty eradication and sustainable development in Africa (MDG at a glance 2005), including cancelling debts, improving access to market through enhanced Official Development Assistance(ODA), increasing movement of foreign direct investments and sharing of technology (MDG at a glance 2005).

2.3 The Concept of Universal Primary Education

Universal Primary Education declared at a world conference in New York (2000) had that by 2015, children everywhere, boys and girls alike, would have been able to complete a full course of primary schooling. Whereas the universal term UPE is restricted to primary education, in Kenya it includes basic education that encompasses early childhood care and education (ECCE), primary education as well as secondary education. In the Kenyan context, goal two is therefore regarded as Universal Basic Education (UBE). In Kenya, UPE is part of basic education that comprises of two years of Early Childhood Care and Education (ECCE), primary education for eight years and a four year secondary education. The Basic Education Act No 14 of 2013 defines basic education as educational programs offered and passed on to a person in an institution of basic education. It includes adult basic education and education offered in pre-primary educational institutions and centers (EFA National Review Report 2015). The second MDG on UPE had the following indicators for monitoring progress which were net enrollment in primary schooling, ratio of pupils targeting standard 1 who reach standard five and lastly the literacy rates of 15 to 24 years of age (UNESCO 2000).

The Ministry of Education, Science and Technology in Kenya also formulated six goals as a move to achieve UPE by 2015 as was contained in the second MDG. These were to expand and improve early childhood development and education by 2010; to ensure that all children, particularly girls, have access to and complete quality primary education by 2015; to ensure that learning needs/educational resources of all young people and adults are met through equitable access to appropriate learning and life skills programs by 2010; to achieve 50 percent improvement in adult literacy, especially for women and equitable access to basic and continuing education by 2005, and achieve gender equality in education with focus of ensuring that girls' full and equal access to, retention and achievement in basic quality education by 2015 and finally to improve the quality of education and ensure excellence so that measurable outcomes are achieved by all, especially in literacy, numeracy and essential life skills by 2010 (MOEST 2003)

2.4 Status of Enrollment in Primary Schools by Gender in Relation to the Second MDG Threshold

The disparities in enrollments by gender in which the enrollments of girls were far much below that of boys triggered most countries to institute policies and programs that were gender responsive, and that which would precisely favor girls' education. This move to increase enrollment for girls was further informed by the many socio-economic benefits involved (Abagi 2009).

There was a general improvement towards gender parity index (GPI) bare minimum as a result of this proper advocacy towards girl child schooling. Zambia introduced a policy on the Program for the Advancement of Girl's Education in 1994. They also started classes for single sex, teacher-parent associations were strengthened, increased the number of women in educational management, introduced girl-oriented curriculum, brought in education offers for children who were vulnerable and advocacy programs at community level (MDG 2012, case study of Zambia). As a result Zambia realized a GPI of one. According this same report, out of the 50 countries that had data, 36 countries had GPI less than one, 16 countries had GPI of one and only two countries consisting of Lesotho and Mauritius had GPI greater than one. The achievement of GPI of one or more by these countries was attributable to the strong advocacy in girl child education (MDG 2012).

In Kenya, besides FPE, affirmative action was also introduced to encourage girls' education. Such affirmative action initiatives included lowering of cut off points for girls for their admission into secondary schools and also giving room to girls who become pregnant and discontinue due to pregnancies to resume the schooling (MoEST 2012). As a result, the net enrollment for girls hit 95.9 percent in 2013 against 90 percent of 2000. Kenya also managed to attain GPI of 0.97 in enrollments in 2014 as shown in table 1.

Year	2009	2010	2011	2012	2013	2014
Boys	4722.8	4789.8	4887.3	4972.7	5019.7	5052.4
Girls	4460.7	4563.1	4673.7	4784.9	4837.9	4898.4
Total	9183.5	9352.8	9581.1	9757.6	9857.6	9950.7
GPI	0.94	0.95	0.96	0.96	0.96	0.97

Table 1: Enrollments in Primary Schools by Gender in ThousandsSource: Ministry of Education statistic booklet 2014

In Homa-Bay, the enrollment in 2014 was found to be 163956 boys against 158539 girls representing a GPI of 0.97 hence meeting the MDG threshold, the out of school children in the same year in Homa Bay county was 2530 boys against 2263 for girls (MoEST 2014).

2.5 Status of the Overall Enrollment Rate of Pupils in Primary Schools in Relation to the Second MDG Threshold

There was a tremendous progress that was made by 2015 in enrolling children in primary schools, as countries across the world shifted from mere commitment towards MDGs to state ownership (MDG report 2015). The number of children who were out of school worldwide had fallen by 50 percent in 2014 to 57 million in 2015 down from 100 million in 2000 as the total enrollment in developing countries had reached 91 in 2015 from 83 percent in 2000. These progresses were made possible due to the concerted global,

regional, national and local levels and the MDG friendly policies that countries adopted. This is because good policies spur rapid educational advances (MDG 2012).

Namibia incorporated compulsory education in their constitution and established policies and programs to enforce compulsory primary education. The results of these witnessed the overall net enrollment in Namibia meeting the MDG threshold. Tanzania also exceeded the minimum MDG target of 95 percent net enrollment by 2012, similar to Algeria, Burundi, Egypt, Togo and Tunisia that had similar policies, because Tanzania rose budgetary allocations, instituted primary education development plan as well as capitation grants. Mauritius introduced penalties on parents who did not send their children to school leading to overcrowding due to enormous enrollments. Similarly, Seychelles eliminated all forms of educational discrimination as Rwanda also introduced a 9-year cycle of compulsory basic education and as a result enrollment in primary schools in these countries had gone beyond MDG threshold by 2015 (MDG report 2015).

The government of Kenya introduced FPE in 2003 and FDSE in 2008, school feeding programs as well as expansion of school infrastructure through KESSP. As a result, the enrolment increased from 7 159 523 in 2003 to 8 330 148 in 2007, representing 16.4 percent increase. The government of Kenya also made basic education compulsory and enshrined it in the constitution of Kenya 2010 as well as the bill of rights no. 14 of the basic education act of 2013. This enabled the enrollment to shoot up to 9559072 in 2014. In addition the completion rates in primary schools in Kenya increased from 57.7 percent

in 2000 to 81.8 percent in 2013 (EFA National review report, 2014). The progress in the enrollments was however uneven. Large disparities were still evident in primary schools enrollment, and the children from poor backgrounds were most affected. Such particular groups of children include girls, children belonging to minorities and nomadic communities, children engaged in child labor and children living with disabilities. For example, the NER in poor regions was 40.7 percent against national average of 91.3 percent in 2010 (MDG report 2012). This disparity is large and suggests that there is some missing link that must be fixed to equitably achieve UPE

2.6 Status of Pupils' Weighted Average Retention Rates in Grade Five in Relation to the Second MDG Threshold

Retention rate in grade five is the proportion of a cohort of pupils in enrolling in standard one and manage to stay in school up-to standard five. The retention rate in standard five was used as an MDG indicator because the successful completion of at least four years in primary for beginners is worth an effort hence an important threshold (MDG 2000). The government of Kenya school feeding program mainly to ensure that pupils stay in school. As a result, the retention rate increased from 90.1 percent in 2003 to 91.6 percent in 2006. The retention rate in standard five moved from 84.3 percent in 2009 to 91.9 percent in 2012 and then to 98.1 percent in 2014 and as a result achieved the EFA objective (MoEST 2014). In most cases, the low retention rates is due to massive dropout, especially for girls, attributed to cultural practices, domestic responsibilities, pressure for early marriage and sexual harassment from teachers and boys among others (MoEST2013).

2.7 Status of the Available Educational Resources in Schools to Achieve Second

MDG in Education

The introduction of compulsory FPE in 2003 in Kenya imposed stress on the then existing educational facilities such as classrooms, equipment and teachers and this affected the quality of education and raised the level of drop-outs in schools(MoEST 2006). In response to this, the government of Kenya through KESSP constructed and equipped schools to match the rising enrollments. The total number of primary schools in Kenya increased from 19 554 in 2003 to 26 104 in 2007 representing 33.5 percent increase. The total number of schools had risen to 29 460 in 2014. Table 2 shows the trend in the expansion of schools from 2007:

Year	2009	2010	2011	2012	2013	2014
Number of schools	22 920	24 114	25 382	26 549	28 026	29 460
Mean school size	401	388	377	368	352	338

Table 2: Trend in Number of Schools and the Average School Size

Source: MoEST Education data, 2014

From table 2, the total number of schools grew at an annual rate of 51 percent between 2009 and 2014 and the average school size was moving towards the threshold. The total number of classes in public primary schools increased from 200 649 in 2003 to 234 666 in 2007 representing 26.2 percent increase. The teacher-pupil ratio on average was 1:50 in 2014 which was still below the threshold (EFA national review 2015). In Homa- Bay, the number of schools were 1089 against a total enrollment of 322 495 representing a school size of about 300(education booklet 2014). However certain areas were still lagging behind in achieving UPE with regard to this variable because learners covered

large distances to schools in some regions due to the manner in which schools were scattered, lack of enough learning facilities such as classrooms and teachers. Furthermore secondary schools failed to grow proportionately to match the growth in primary schools and there was also inadequate funding of special education. Finally there was failure to avail educational resources in the schools which ranges from human resources, physical resources, teaching materials and financial resources to meet the indirect costs of education, directly affect enrollments, retention as well as completion rates, thereby contributing to the achievement of UPE(MoEST 2014).

2.8 Summary of the Reviewed Literature

The literature that has been presented here shows that many parts of the continent, especially in Sub-Saharan Africa, have made tremendous improvements in achieving the MDGs in relation to education, even though coming by the MDG threshold has been a hard nut to crack. For example, due to strong advocacy for girls' education, Lesotho and Mauritius had a GPI greater than one while out of 50 countries in Africa, 36 had GPI less than one (MDG 2012). In addition, NER in poor regions in Kenya stood at 40.7 percent against a national average of 91.3 percent in 2010. The retention rate in grade five showed a tremendous improvement in Kenya as a result of the policy initiatives introduced by ministry of education and registered 98.1 percent in 2014. However there were low retention rates in poor regions of the country due to massive dropouts, especially for girls, attributed to cultural practices, domestic responsibilities, pressure for early marriage and sexual harassment from boys and teachers. The report therefore shows

that certain parts of the country Kenya were left behind hence informing the need for the study.

2.9 Theoretical Framework

The study was derived from the human capital development theory (HCDT) which postulates that investment in human capital leads to greater economic output. In other words, a person's education is an investment, involving both direct and indirect costs, and makes the individual more productive to the society (Sullivan 2003).). The theory is rooted in the writings of the Classical authors like Adams Smith (1776) and Alfred Marshal (1890). According to this theory, education generates economic benefits such as increased productivity. The fundamental implication of HCDT to education is that allocation of resources on education should be expanded to the point where the present value of the streams of returns to marginal investments is equal to or greater than the marginal costs. The theory emphasizes the need to invest heavily in education which is viewed as a basic human right by the social demand approach to planning in education (Sullivan 2003). In particular, primary education was the foundation for high degree of quality in skills development in numeracy and literacy which were very instrumental in science and technology (MDG 2012).

The second MDG in education had an aim to ensure that by 2015, children everywhere, boys and girls alike, would be able to complete their full course of primary schooling. Furthermore, the ultimate goal of MDG was to eradicate extreme poverty by 2015. Education therefore spurs rapid economic growth thereby reducing poverty levels and hence achievement of the MDG. It is in response to this theory of the HCDT that the second MDG was thought of as a bed rock upon which other MDGs would be achieved and hence a number of policy guidelines were instituted both globally and locally so that UPE would be achieved by 2015.

2.10 Conceptual Framework:



Figure 1: Illustration on the Relationship between the Second MDG with Other Variables

The diagram shows the relationship between the second MDG and other variables. When there is 95 percent and above net enrollment rate of the pupils, 95 percent and above retention rate, gender parity index of one or more as well as availability of adequate educational resources then MDG on UPE is said to have achieved. This means that achieving MDG on UPE is influenced by the following four achievement indicators: overall net enrollment rate of 95 percent or more, enrollment by gender with GPI of one or more, retention rate of 95 percent or more in grade five and availing educational resources such as classrooms, teachers, toilets and textbooks which are able to accommodate increasing enrollments of pupils who were out of school and reduce the dropout rates resulting from congestion and pressure exerted on the available resources (MoEST 2006).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design, target population, sample size and the techniques used in sampling, research instruments, validity of the instruments, reliability of the instruments, data collection procedures, data analysis techniques that would be used as well as ethical issues that were to be considered during research.

3.2 Research Design

Best and Kahn (2006) defined a research design as any plan that shows how the problem to be investigated will be solved. The study made use of descriptive survey research design. According to Orodho (2005), a descriptive survey research design is a method of data collection through interviews and administration of questionnaires to a selected sample of individual, objects or events. In this method, there is no manipulation of the findings. This design was suitable because the researcher was to collect first-hand information, analyze and present the data as it were without any manipulation of the variables in the study.

3.3 Target Population

Mugenda and Mugenda(2003) defined target population as an entire group of individuals, events or objects having observable characteristics that the researcher wants to generalize the results of the study. The study targeted all the 142 public primary schools in Homa-Bay sub-county.

3.4 Sample Size and Sampling Techniques

A sample is a finite part of a statistical population whose properties are studied to gather information about the whole. In other words any statement made about the sample should be true to the entire population (Orodho 2012). The research targeted all the 142 head-teachers of all the public primary schools in Homa-Bay sub-county. However, constrained by time and finances, the researcher had to systematically and conventionally select a sample from the target population that was sufficiently representative. A good sample size is large enough to serve as an adequate representation of the population about which the researcher wishes to make a generalization and small enough to be selected economically. As a result, the best sample size is that which is able to cover at-least 30 percent of the target population (Best and Kahn 2006).

Sampling is the process of selecting a number of individuals or objects from a population a way that the selected group contains elements representative of the characteristics found in the entire population (Orodho and Kombo, 2002). The study targeted all the 142 public primary schools in Homa-Bay sub-county. The sampling technique that was used in this study was a multistage random sampling in which schools were first of all categorized into four wards made up of Arujo ward, Homa-Bay Central ward, Homa-Bay West ward and Homa-Bay East ward. Thereafter, the researcher got 30 percent of schools from each ward using simple random sampling. In this case, the researcher wrote names of the schools in a piece of paper, folded the paper and placed it in a tin bearing the identity of the ward where that school was found. Each of the tins was shaken thoroughly to mix the folded papers uniformly. The researcher then picked schools from each tin that made up
to 30 percent of its content at random without replacement. These were the schools that received letters for the study.

3.5 Research Instruments

These were the tools that enabled the researcher to gather data from the participants. For this study, the researcher used questionnaires for head-teachers because they permitted collection of data from a wide population and they didn't also require a lot of time to administer. The questionnaires had both open ended and closed questions. The questionnaire had two sections; A with respondent's demographic information and section B on the specific research information. The researcher also employed the use of observation checklist in collecting data since it guaranteed accurate data collection from the field.

3.6 Validity of the Research Instruments

According to Kombo and Tromp (2009), validity of an instrument refers to a measure of how well a test measures what it is intended to measure. The researcher organized the tools and had to seek verification of experts and modification from the supervisors so that the instruments could be administered and their validity guaranteed. In this regard correct items were retained, inadequate items were discarded and those that required corrections were modified based on the guidance from the supervisor.

3.7 Reliability of the Instruments

Reliability refers to a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda and Mugenda 2003). For the reliability of the instruments to be guaranteed, piloting was done in three schools that were not among the schools making up the sample within the sub-county. The researcher used reliability coefficients in order to ascertain the reliability of the instruments. The table 3 shows that all the scales were significant because they had an alpha above the prescribed minimum of 0.7 (Mugenda 2003). The results showed that educational resources with eight items had the highest reliability coefficient of 0.813 while weighted average cohort retention rate with one item had the lowest reliability coefficient of 0.712.

Table	3:	Re	liabi	lity	coeff	icient	ts
	•••						~~

Scale	Alpha	Number of items
Enrollment rate by gender	0.752	1
Overall enrollment rate	0.801	1
Weighted average grade five retention rate	0.712	1
Available educational resources	0.813	8

In general, all the instruments used during this study were established to be reliable.

3.8 Data Collection Procedures

The researcher first obtained a letter of introduction from the University of Nairobi authenticating the research. The researcher then sought for research permit from the Ministry of Education, Science and Technology to carry out a research from the National Commission for Science, Technology and Innovation (NACOSTI). The permit was then taken to the sub-county commissioner and the sub-county director of education of Homa-Bay to request for permission to carry out a research at the primary schools of Homa-Bay sub-county.

The researcher then wrote letters to the head-teachers of the selected schools seeking appointments with them to carry out research. The researcher established good rapport between him and the respondents and explain the purpose of his research. The researcher assured the respondents that their responses would be used exclusively for research purposes and that their identities would remain concealed. The researcher then administered the instruments to the respondents and allowed them about one week to respond. The researcher then collected the instruments upon completion and embarked on thorough analysis.

3.9 Data Analysis Techniques

The researcher had to sort out the collected data and check to ensure every item within the questionnaire was duly filled and accurate. The study generated quantitative data that were entered the computer and analyzed using a program of Statistical Package for Social Sciences (SPSS) version 21. The SPSS was appropriate because it is integrated collection of computer programs for managing, analyzing and displaying data. Both descriptive and inferential statistics were used to summarize the quantitative data in terms of charts, graphs and tables to help discuss the findings.

3.10 Ethical Considerations

Ethics is defined as that branch of philosophy which deals with one's conduct and a guide towards one's behavior (Mugenda and Mugenda 2003). The ethical behavior of a researcher for an effective and meaningful research should be under unprecedented scrutiny (Best & Kahn 2006). In this regard, the researcher had to obtain a letter of introduction from the University of Nairobi authenticating the study. The researcher sought permission from the NACOSTI, sub-county commissioner, sub-county director of education as well as the sampled primary school head-teachers. The respondents were assured of concealed identity and that the responses would be used exclusively for the study. The researcher also acknowledged all the sources of information related to the study.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter comprises data presentation, interpretation and discussion. It begins by analyzing the response rate then to the descriptive statistics using tables and figures to present data. It then concludes by interpretation of the findings by use of inferential statistics.

4.2 Response Rate

The study targeted 142 respondents who were public primary head-teachers in Homa-bay Sub-County in Homa-bay County. However, 43 head-teachers were interviewed representing 30 percent of the target population . Figure 2 shows the finding:



Figure 2: Response Rate

Figure 2 is a pie-chart of the response rates. Here, 95.0 percent of the questionnaires given out were duly filled and given back after follow-ups by the researcher. This response rate was considered adequate for the study (Mugenda 2003).

4.3 Demographic Characterization of the Respondents

There were four main classification of the respondent's demographic information including gender, age, level of education and subjects taught.

4.3.1 Gender of Respondents

The table 4 shows gender of the respondents:

Table 4: Gender of respondents

Gender	Frequency	Percentage
Female	23	57.5
Male	17	42.5
Total	40	100

From the findings as shown in table 4, females were accounting for 57.5 percent of the head teachers. An implication is that majority of the primary school head teachers in the county are held by females. The figure 3 is a bar graph representation of the finding:



Figure 3: Gender of Respondents

The results in figure 3 show that Homa-Bay sub-county had more females than males in top positions in leadership at primary schools thereby responding to affirmative action requirements as is contained under MDGs.

4.3.2 Age of Respondents

The study aimed to investigate age distribution of the Schools' head teachers in the study area. The ages were grouped into various categories which included below 30 years, between 30 to 39 years, between 40 to 49 years and above 50 years. The finding was as shown in figure 4:



Figure 4: Age of Respondents

Figure 4 shows that 33.3 percent of the respondents were aged 40 to 45 years. This shows that most of the participant of the study were considerably young and hence workaholic. This implies that they are able to drive the MDG agenda in these schools within the sub-county.

4.3.3 Highest Level of Education

The researcher sought to find out the highest level of the academic achievements of the respondents. These achievements were ranging from A-level, certificate, diploma, bachelor's degree, master's degree to doctorate. The findings were as presented in figure 5:



Figure 5: Highest Level of Education

Figure 5 shows the findings, whereby 50 percent of the respondents had a Diploma. This depicted that most of the head teachers in the study were qualified and capable of performing their duties well so as to deliver services in their respective schools effectively.

4.3.4 Duration in Heading the Current Institution

The researcher also sought to establish the length of time head teachers have been serving in their current schools. Data was collected by categorizing the length of stay as follows: those below six months, those above six months but below two years, those between two and three years and those above three years of stay. The finding was as shown in figure 6:



Fig 6: Experience in the Current Station

According to the finding in figure 6, above 75 percent of the respondents had been serving in the current position in the schools for a period of above two years. This depicted that most of the Public primary Schools head teachers in the study were presumably experienced and hence understood the cultural and political diversities of the surrounding community. This enabled them to perform their duties peacefully for the benefit of the child as well as effective service delivery in their respective schools to ensure that the Second Millennium Development Goal on education is attained at public primary schools in Homa-Bay Sub-County in Homa- Bay County.

4.3.5Teaching Subjects

The researcher also sought to establish subjects that that teachers have been teaching in the respective schools. The subjects were categorized as either group A or group B. Figure 7 shows the finding:



Fig 7: Teaching Subjects

The finding in figure 7 was that 60.0 percent of the head-teachers taught subject of Group B. There is therefore need to ensure balance in distribution of teachers in accordance with the subjects they teach.

4.4 Respondents' Opinions as per the Objectives

This section presents the quantitative analysis of the responses in objectives one up to four of the questionnaires which were: to determine the enrollment rates, by gender, of pupils at primary schools in relation to the second MDG threshold in Homa-Bay subcounty; to determine the overall enrollment rate of pupils in primary schools in relation to the second MDG threshold; to calculate the weighted average cohort retention rates of pupils at standard 5 from 2010 to 2015 in public primary schools compared to the second MDG target and to examine the availability of the educational resources of pupils in primary schools needed to achieve second MDG.

4.4.1 Enrollment Rates, by Gender, of Pupils in Primary Schools in Relation to the Second MDG Threshold in Homa-Bay Sub-county

The finding in figure 8 indicates percentage of enrollment of pupils in the sub-county by gender.



Figure 8: Enrollment of Pupils

Figure 8 showed that 54 percent of the pupils are boys. When the number of girls enrolled in the sub-county is divided by the number of boys in the sub-county, a GPI of 0.85 is obtained. This contradicts the statistics that was carried in the county of Homa-Bay in which a GPI of 0.97 was found in the year 2014 (MoEST 2014). This shows that Homa-Bay sub-county still lags behind in ensuring girls get access and consequently transit to higher levels of study. The GPI in higher classes was even lower translating to 0.82 due to dropouts of girls as a result of early pregnancies as well as early marriages among others as highlighted by the head-teachers during the interview.

Figure 9 shows the findings on the enrollment in the schools from class one to class eight during the year 2017:



Fig 9 Percentage Enrollment

Figure 9 suggests that disparities were still evident in primary schools in Homa-Bay Sub-County with the disparity being seen right at enrollment in Class 1 it was found to be 52 percent for Boys and 48 percent for girls. The rate continued to decrease as the children progressed where the disparity seemed to have hit its peak in class 5, 6, 7 where enrollment for girls had drastically reduced translating to a GPI of 0.82. The reasons during the interview with the head-teachers majorly showed that the regions under study had social economic factors that made it possible for girls to drop out for early marriages as well as early pregnancies. This disparity is large and suggests that there is some missing link that must be fixed to equitably achieve the second MDG (MDG 2017).

4.4.2 Overall enrollment rate of pupils in primary schools in relation to the second

MDG threshold

The second objective was to determine the overall enrollment rate of pupils in primary schools in relation to the second MDG threshold. The findings on this are as reported in this section.

The figure 10 indicates the total enrollment of pupils in the sampled schools under study:



Fig 10: Overall Enrollment Years

Figure 10 indicates that the overall enrollment of pupils across Homa-Bay Sub-County was reducing as we moved to higher classes. From the results in figure 10, out of the 142 public primary schools in Homa-bay sub-county, 40 schools that were sampled gave a total enrollment of 13,336. This extrapolated to about 47, 342 in all the 142 primary schools in this sub county. According to the Census report of 2009, there was a projection of 52, 723 primary school going age of whom 8 percent would be in private schools. The

expected population in public primary schools at 92 percent of the estimated population constituted 48,505 of the population. This gave an overall enrollment rate of 97.6 percent at the time when the study was carried out. This showed that Homa-Bay sub-county attained the required MDG threshold in terms of overall enrollment rate. This was attributed to viable policies on education put in place by the county government of Homa Bay as suggested by the head-teachers during the interview.

4.4.3 Retention Rate in Grade Five Compared to the Second MDG Target

The third objective of this study aimed at calculating the weighted average cohort retention rates of pupils at standard 5 from 2010 to 2015 in public primary schools compared to the second MDG target. In order to calculate the weighted average cohort retention rate in standard five, the researcher first calculated the grade to grade retention rates (GRR) from class one to class five for each sample using the formula:

GRR- N_{k*1}

N_k

Where N_{k*1} is the enrollment in the current grade or class while N_k is the enrollment in the previous grade or class. The weighted average cohort retention rate was then calculated by taking the sum of GRR for all the individual samples and divided by the total number of schools in the sample. This resulted into weighted average grade five cohort retention rate of 92.6 percent for public primary schools in Homa-Bay sub-county which was far below 95 percent MDG threshold. This GRR of 92.6 percent fails to agree with a GRR of 98.1 percent in the entire county of Homa-Bay in 2104 (MoEST 2014), and hence shows that the sub-county lags behind in attaining the second MDG. The figure 11 summarizes the findings on the trend-line grade to grade retention rates from class one to class five between 2010 and 2017:



Fig 11: Periodic Grade Retention Rates

Retention rate in grade five is the proportion of a cohort of pupils in enrolling in grade (standard) 1 and manage to stay in school up-to grade (standard) five. It is evident in figure 11 that retention was best in class one and two but went down drastically in class five. There are reasons that were responsible for these low retention rates such as transfers to other schools outside the sub-county and private institutions as was suggested by the head-teachers during interview as well as possible repetitions that were not accounted for during the research. Similarly, the low retention rates were due to massive dropout, especially for girls, attributed to cultural practices, domestic responsibilities, pressure for early marriage and sexual harassment from teachers and boys which at times are never reported as given by the head-teachers.

4.4.4 Educational Resources Available in the Schools

The last objective of the study was to find information on the availability of educational resources necessary for the achievement of the second MDG by ensuring enrollment and retention of pupils at public primary schools within Homa-Bay sub-county. These resources ranged from physical, financial, teaching to human resources.

4.4.4.1 Physical Facilities in the School

The study sought to establish the physical facilities available in the school compound that can be used to drive MDG agenda on education. The figure 12 shows the physical facilities available:



Figure 12: Physical Facilities in the schools

The results in figure 12 showed that these resources available are not sufficient in relation to the threshold required to cope with the rising enrollments in schools due to the FPE and as a result the congestion forces students either to transfer to other schools or drop out thereby not meeting the second goal of the MDG.

 Ratio	Frequency	Percent	
 1:3	18	47.4	
1:4	7	18.4	
1:5	13	34.2	
 Total	38	100	

Table 5: Pupil: text books Ratio

Table 5 shows that only 47.4 percent of the head-teachers indicated that the textbook: pupil ratio was 1:3 which, according to the ministry of education is recommended to achieve the second MDG in education. However, the ratio 1:4 and 1:5 still indicated the textbooks were still inadequate to achieve the goal. A good ratio of pupils to instructional materials in schools often increases a pupil's attention level in the activity, lesson or assignment since books help learners focus on the project at hand and can be a vital tool for maintaining a student's interest in the topic learned.

4.4.4 Funding of Schools

The researcher sought to establish from head teachers whether apart from the government there were any other sources of funds to the school. Figure 13 shows the finding:



Fig 13: Funding

Figure 13 shows that the number of head-teachers who said there was no such funding was accounting for 75.0 percent. This implies that most head-teachers could find it difficult to manage the schools with the few resources available to deliver education services to the pupils. In addition, funds were lacking to either improve or maintain the dilapidated resources in our public primary institutions as was established by the researcher in the checklist. The fact that most primary schools in this sub-county did not get extra funding from other sources would also mean such schools were not even able to employ extra teachers on PTA terms to help reduce the ratio of pupils to teachers in such schools. The result of this was either drop out of pupils or imposed repetition which led to the failure to achieve the second goal.

4.4.4.3 Other Facilities within the Schools

The researcher was also interested in finding out the other social amenities that could be available in the school such as connectivity to electricity as well as the sources of water available. The results were as follows:

1) Electricity Connection

The researcher sought to establish the number of schools connected to electricity. The figure 14 shows the percentage of schools connected to functional electricity:



Fig 14: Connection to Electricity

Figure 14 shows that majority of the head teachers accounting for 60.0 percent indicated that their schools were not connected to electricity. As the researcher also moved around with his checklist, he realized that most of the schools had non-functional electric connections that were not able to run school activities that required electricity.

II) Sources of water

The study also established the sources of water for the schools. Figure 15 shows the finding:



Figure15: Sources of water for the schools

The finding as per figure 15 was that different schools had different sources of water with most schools using rivers accounting for 45 percent of the total responses. This result showed that most schools were still not well equipped when it comes to water provisions either for drinking or laundry purposes and this worked against enrollment and retention of pupils in these schools.

III) Number of TSC teachers in the school

The researcher also established the number of teachers employed by the Teachers' Service Commission (TSC). The finding was as shown in figure 16:



Fig 16: Number of TSC Teachers

The study as shown in figure 16 found out that majority of the head-teachers accounting for 55 percent indicated that they had an average of 10-12 teachers who could man about 380 pupils on average. Generally there was inadequate number of TSC teachers in these primary schools and hence compromised quality service delivery in education and as a result parents either transferred their pupils to private schools or the pupils were forced to drop out or repeat to respond to such existing teacher shortages.

4.4.4 Overall Educational Resources Available in the schools

The researcher sought to rate the overall educational resources available in the schools as compared to the population of pupils. The figure 17 shows the finding:



Fig 17: Overall Educational Resources

The findings in figure 17 showed that the education materials were generally inadequate as indicated by 45.0 percent of the head-teachers. Inadequate educational resources in the schools which included human resources, physical resources, teaching materials and financial resources to meet the indirect costs of education, directly affected enrollments, retention as well as completion rates that may have affected the achievement of the second MDG. The inadequate educational resources as found in this study is in agreement with the statistics of Kenya National Bureau of Statistics that showed that educational resources available in schools were not adequate to cope with the rising enrollments in schools (education booklet 2014).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This is the last chapter of the project. It is divided into five parts. The chapter begins with the summary of the study, summary of the research findings, conclusions, recommendations and then the suggestions for further research.

5.2 Summary of the Study

This research project was aimed at evaluating the level of attainment of the second Millennium Development goal in education at primary schools in Homa-Bay Sub-county within Homa-Bay County. The objectives of this project were to determine the enrollment rates, by gender, of pupils in primary schools in relation to the second MDG threshold in Homa-Bay sub-county, determine the overall enrollment rate of pupils in primary schools in relation to the second MDG threshold, calculate the weighted average cohort retention rates of pupils at standard 5 from 2010 to 2015 in public primary schools compared to the second MDG target and to examine the available educational resources of pupils in primary schools needed to achieve second MDG. The study adopted a multistage random sampling to identify the sample for research as well as descriptive research design to collect data. From the research findings, it was concluded that Homa-Bay sub-county had not fully attained the second millennium development goal on education.

5.3 Summary of the Findings

With regard to the first objective, the gender parity index (GPI) was found to be 0.85. This is considerably very low as compared to a GPI of 0.95 threshold arrived at by the Millennium Development Goal. The low gender parity index in this sub-county is attributed to certain parameters which are but not limited to early pregnancies domestic responsibilities resulting from single parenthood and orphanage, cultural practices, pressure for early marriage as well as sexual harassment from teachers and boys which end up not being reported by the head-teachers in their respective schools. All these work against girl-child education and hence see girls drop out of school at early stages of their schooling.

In terms of the second objective of the overall enrollment rate was found to be 97.6 percent. This implies that the sub-county has managed to attain an overall enrollment rate that is above a threshold of 95 percent established by the Millennium Development Goal. This shows that only 2.4 percent of the children of the official school going age are out of school. This contradicts the finding in the first objective which showed that the sub-county has not attained the threshold on gender parity index. This means that the majority of those out of school are girls since they have a lower ratio to boys as per the first objective. This low enrollment for the girls as per the study was due to the massive drop out attributed to domestic responsibilities, early pregnancies and sexual harassment from teachers and boys. However the high overall enrollment ratio was due to the free primary education programs, expansion of infrastructure especially in rural settings, school

feeding programs as well as making basic education compulsory as the interview by the head-teachers so depicted.

As for the third objective, the results showed that the retention rate at grade five had gone down again to 92.6 percent which was below the 95 percent MDG threshold. Generally, the government was out to increase retention rate in grade five by introducing school feeding programs as well as making basic education free and compulsory. However the study showed that the retention rate was low because during the study, the school feeding programs didn't exist following the observation made by the researcher as pupils were seen walking back home for lunch in virtually all the schools visited. This as per the view of this research does not inspire retention as long distances between schools and homes as well as missing of meals a number of times made students to drop out of school. The study also depicted that most affected by the low retention are the girls due to massive drop out attributed to domestic responsibilities, early pregnancies and sexual harassment from teachers and boys.

Lastly, with regard to the fourth objective, generally most head-teachers, accounting for 45 percent, were of the opinion that the resources available in schools to facilitate learning were inadequate. There had been a remarkable trend in enrollments since 2010 but as the number of enrollments was outweighing and causing stress on the facilities available, the enrollments began to go down. This was due to the congestion as well as compromised quality of education as a result of rising enrollments but stagnating educational facilities and the end result of this was seen in either transfers to private schools or massive drop- out rate especially for girls.

5.4 Conclusions of the Study

From the research findings it can be concluded that the sub-county of Homa-Bay has not been able to achieve fully the second millennium development goal on education at primary schools. This conclusion is arrived at because out of the four objectives, the subcounty has only been able to attain only one of the requirements of the second MDG in education by attaining above 95 percent net enrollment of pupils. However, the other three objectives did not measure up to the required threshold hence. The reasons for these are summarized by the high drop-out rates especially for girls due to pressure for early marriages, domestic responsibilities, sexual harassment from boys and teachers as well as congestion in schools due to inadequate educational resources to cope with the high enrollments caused mainly by free primary education in the public schools.

5.5 Recommendations of the Study

The findings of the study informed the following recommendations:

- The government should strictly implement policies on incentives such as free lunch, uniforms, free text books and transportation to encourage school enrolment.
- ii) The government should on their part ensure faster disbursements and commensurate release of constituency development funds as well as FPE funds to allow quick and accurate implementation of these programs.

- iii) The national government in collaboration with the county government should improve on the existing strategies by scaling-up educational programs and projects under the existing MDGs interventions including the Conditional Grant Scheme and Quick Wins Projects as well as widen the scope of other funded projects/programs to cover the gaps identified in the course of the implementation process.
- iv) The government also needs to introduce boarding facilities and single sex programs as well as partner with community based organizations to sensitize the girls on the importance of education and how to avoid sexual pressure from their male counterparts.
- v) Last but not least, there needs to be stringent follow up measures on the reasons behind several girls in this sub-county not managing to complete their basic education as is prescribed by the law. To realize GPI of one, the county government of Homa-bay should implement affirmative action and follow up its implementation to the letter.

5.6 Suggestions for More Research

The following are the suggestions for more research:

 i) Undertake the study on the topic on the Second Millennium Development Goal on Education at Private Primary Schools in the same Sub-County so as to find out whether the same problem also exists.

- ii) Comparative study on the same topic should be done to find out the urban and rural trend on Second Millennium Development Goal on Education at Public Primary Schools in the same sub county.
- iii) Possible contributors to girls' major drop-outs from primary schools than boys in Homa-Bay sub-county and their possible solutions.

REFERENCES

- Abagi, J(2009), Education for all in Kenya; improving access and retention of marginalized group within the school system in basic education for all.
 Basic Education Resource Centre for Eastern and South Africa
- Best, J. & Kahn, J(2011), *Research in education*(10thed). Boston; Peason Education, inc.
- Bruns, B & Mirigat, A (2003), Achieving primary education by 2015; achievement for every child. World bank; Washington DC.
- Chimombo J.(2009), *Changing patterns of access to basic education in Malawi*; Comparative Education.
- Daily Nation (2015), Postmortem on EFA in Kenya. Nation Printers.
- EFA (2014), Facts and figures. Kenya National Bureau of Statistics
- EFA (2015), Facts and figures. Kenya National Bureau of Statistics.
- EFA Global Report (2005), *Towards EFA: The quality imperative*. United Nations, New York
- KNBS (2013), *Homa-Bay first county integrated development plan*. Government publishers, Homa-Bay
- Kombo D.K & Tromp D.A (2006), *Proposal and thesis writing; introduction*.Nairobi : Pauline's Publications Africa
- Kothari C. R(2013), *Research methodology*(2nd revised ed). New Age International Publishers.
- Kothari, C.(2000), *Research methodology, methods and techniques*. New Delhi; New Age International Ltd.
- MDG (2005), Millennium at a glance. United Nations, New York.
- MDG (2010), Beyond the midpoint. UN Department of Public Information.
- MDG (2015), *Time for global action for people and planet*. United Nations, New York.
- Ministry of Education (2012), A policy framework for education, aligning education and training to the constitution of Kenya2010and Kenya vision 2030 and beyond. Government Printers, Nairobi.

- Ministry of Education(2006), Facts and Figures 2002-2008. Nairobi EMIS, Kenya.
- Ministry of Education(2009), *Education Facts and Figures 2002-2009*. Nairobi-EMIS.
- Mugenda O. M and Mugenda, A.G (1999), Research methods; quantitative and qualitative approaches. Nairobi; Acts Press
- Mugenda, O and Mugenda, A(1999), Research methods, qualitative and quantitative approaches. Nairobi: Acts Press
- Mugenda, O. M and Mugenda A. G(2003), *Research methods:qualitative and quantitative approaches*. Nairobi, Kenya.
- Orodho (2005), *Techniques for writing research proposals and reports*.New York; Prentice Hall.
- Orodho J. A (2005), *Techniques of writing research proposals and reports in education and social sciences*. Nairobi: Masola Publishers.
- Orodho J. A (2009), *Elements of education and social science research methods*. Maseno; Kanezja Publishers.
- Orodho(2003), *Essentials of education and social sciences research methods*. Nairobi; Masola Publishers.
- Republic of Kenya (2005), Kenya education support program 2005-2010; delivering quality education and training to all Kenyans. Government Printers
- Republic of Kenya (2011), Kenya National Bureau of Statistics; Economic Survey 2011Report.Nairobi; Government Printers.
- Republic of Kenya (2012), Kenya National Bureau of Statistics; Economic Survey 2012Report.Nairobi; Government Printers.
- Republic of Kenya(2013), *Ministry of Education Science and Technology; Education cluster annual report*. Nairobi; Government Printers.
- Sessional Paper Number 14 (2012), *Ministry of education, science and technology*. Government Publisher.
- Sullivan, Arthur, Steven M, Sheffrin(2003), *Economics principles in action*. Upper Saddle River, New Jersy. Pearson Prentice Hall

- The Constitution of Kenya (2010), Sessional paper no. 14 of 2012; reforming education and training in Kenya.Nairobi; Government Printers.
- UNESCO (2006), World declaration on education for all. Meeting basic *learning needs*. Reports on the Jomitien Conference.
- UNESCO(2000), *The rights to education; towards education for all throughout life* (world education report). Paris: UNESCO Publishers.
- UNESCO(2002), Education for all. Is the world on track?.Paris Graphic Printers.
- UNESCO(2005), EFA Global Monitoring report: Education for all: The quality imperative. UNESCO, Paris.
- UNESCO(2010), EFA Global Monitoring report; reaching the marginalized, education for all. Oxford University Press.
- UNESCO(2011), Education counts; towards the Millennium Development Goals. Paris.
- UNICEF(1992), Strategies to promote girls' education; policies and programs that work. New York.
- World Bank(2001), *Meeting basic learning needs; a vision for the 2015*. New York.

APPENDICES

APPENDIX A: LETTER OF INTRODUCTION

Joshua Ogada Akoth P.O Box 81-40300, Homa- Bay Mob No. 0720031041 E-mail:akothjoshua@gmail.com 20th April, 2017.

The Head- teacherPrimary school, P. O. Box Homa-Bay.

Dear Sir/Madam

Re: Permission to collect data in your school

I am a student at the University of Nairobi pursuing a Masters of Education Degree at the Department of Education Administration and Planning specializing in Planning. I am carrying out research on **"Level of Attainment of the Second Millennium Development Goal on Education at Primary Schools in Homa-Bay Sub-County in Homa-Bay County, Kenya".** I kindly request your office to assist me in this exercise.

The information being sought will help me in my academic work and will be meant exclusively for research. I look forward to your favorable consideration.

Yours faithfully

Joshua Ogada Akoth

Reg. No: E55/70667/2013

APPENDIX B: HEAD-TEACHER'S QUESTINNAIRE

You are kindly requested to fill in the questionnaires below that attempt to seek information on the level of attainment of the millennium development goal in education at primary schools in Homa-Bay Sub-County. The information obtained is strictly meant for research and will be treated as such.

Respond appropriately by either putting a tick() inside the bracket or filling in the blank spaces

SECTION A: BIODATA OF THE RESPONDENT

Head-teachers demographic information

1) Gender							
Male () female ()							
II) Age bracket							
Below 30 () 30-39 () 40-49() above 50 ()							
III) Highest level of education							
Certificate () A-level () diploma () masters () PhD ()							
Any other? Specify							
V) Teaching subjects							
Group A () group B ()							
Any other? Specify							
VI) For how long have you been heading the current institution?							

••••••

SECTION B: SPECIFIC RESEARCH INFORMATION

PART I: Enrollment of Pupils

a) Fill the table below for the number of pupils in this school per class and gender

Class	1	2	3	4	5	6	7	8
Pove								
BOys								
Girls								

PART II: Retention Rate of the Pupils in Standard Five

Fill in the table for the enrollment of pupils in your school between 2010 and 2017 from class 1 to class 5

Year/class	Std 1	Std 2	Std 3	Std 4	Std 5
2010					
2011					
2012					
2013					
2014					
2015					
2016					
2017					

Part III: Educational Resources available in the school

a) Fill in the table below on the physical facilities in the school

Facility	Number
Classrooms	
Toilets	
Average desks per class	
Printers	
Photocopiers	

b) What is the average textbook: pupil ratio per class in your school?

Class	1	2	3	4	5	6	7	8
Textbook:								
pupil								
ratio								

- c) A part from the government, is there any other source of funds to the school?Specify......
- d) Indicate whether there are other facilities within the school as follows:
 - i) Electricity

Connected () not connected ()

ii) Source of water

Tap() lake() river() borehole() others()
- iii) Number of playing fields in the school
- iv) How many teachers employed by TSC does this school have?

.....

- v) In your own opinion in a scale of 1-5 below, how do you rate the overall educational resources available in this school as compared to the population of the pupils
- (1) Excess (2) adequate (3) inadequate (4) not there (5) I don't know

XXXXX THANK YOU XXXX

APPENDIX C: OBSERVATION CHECKLIST

Researcherdate
Schooltime ended
Number of teachers in the school timetable
Number of classrooms
Number of streams per class in:
Lower primary
Upper primary
Number of toilets
Source of power
Average number of pupils per desk
Average population per class
Playing ground
Number of photocopiers
Number of printers
School library

APPENDIX D: RESEARCH AUTHORIZATION



NATIONAL COMMISSION FORSCIENCE, TECHNOLOGY ANDINNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax: +254-20-318245,318249 Email: dg@nacosti.go.ke Website: www.nacosti.go.ke When replying please quote 9thFloor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No. NACOSTI/P/17/97205/17757

Date: 6th July, 2017

Joshua Ogada Akoth University of Nairobi P.O. Box 30197-00100 NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "An evaluation study on the level of attainment of the second millennium development goal on education at public primary schools in Homa Bay Sub County in Homa Bay County Kenya," I am pleased to inform you that you have been authorized to undertake research in Homa Bay County for the period ending 6th July, 2018.

You are advised to report to the County Commissioner and the County Director of Education, Homa Bay County before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

GODFREY P. KALERWA MSc., MBA, MKIM FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Homa Bay County.

The County Director of Education Homa Bay County.

National Commission for Science, Technology and Innovation is/SO9001:2008 Certified

APPENDIX E: RESEARCH PERMIT



APPENDIX F: RESEARCH CONDITIONS

CONDITIONS

- The License is valid for the proposed research, research site specified period.
 Both the Licence and any rights thereunder are
- non-transferable.
- Upon request of the Commission, the Licensee shall submit a progress report.
 The Licensee shall report to the County Director of Education and County Governor in the area of
- research before commencement of the research. 5. Excavation, filming and collection of specimens are subject to further permissions from relevant
- Government agencies. 6. This Licence does not give authority to transfer
- The License over not give autority to transfer research materials.
 The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
 The Commission reserves the right to modify the
- conditions of this Licence including its cancellation without prior notice.





National Commission for Science, **Technology and Innovation**

RESEARCH CLEARANCE PERMIT

Serial No.A 14716

CONDITIONS: see back page