



WAJIR DIGITAL LIBRARY FOR MOBILE LEARNING



Project Overview	
Project Name	WAJIR DIGITAL LIBRARY FOR MOBILE LEARNING
Project Location	Wajir, North eastern part of Kenya
Geo Reference	N 1.7674951244185004, E40.06917794533744
School Name / Type	The Faulu Secondary School / Form 1 to Form 4
Primary Sector	Education
# direct beneficiaries	246
# indirect beneficiaries	Over 1000 families
# teachers male/female	Male 8 , Female 3 (7 registered with teachers service commission)
# learners m/f	Male 122, Female 124
# classrooms	8
Library	1 library with few books. Space available for digitalization.
Power Infrastructure	Grid power - power socket available in classrooms.
ICT Infrastructure	7 laptops, 1 room with 4 computer tables
Internet	None
Project Partners	Wilearn 4 life
Start date of project	5th March 2021
Duration	1 month installation and workshop
Project Coordination	The Faulu Secondary School
Local Contact Person	Dalmas Adongo,
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Proposed Total Budget	\$14'600
Funding Request	\$14'600
Date of submission	21nd January 2021
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SUMMARY

The Faulu secondary school is a community school with a Christian heritage in Wajir County northern Kenya that provides post primary education for both boys and girls in a Muslim dominated region. Wajir is among the counties categorized as Arid and semi-Arid lands in Kenya (ASAL) where people depend on pastoralism. Crop farming can only be done in this region under irrigation which is too expensive for the average households in this region. Food consumed here come from other counties where crop production is practiced and at times due to poor roads take time or get spoiled before reaching the market. Occasionally Wajir county faces security threats from Al Shabaab militia from the neighbouring country Somalia. They mostly target non local Christians. The government has in the recent past improved security by deploying more security officers to man the border points.

EDUCATION IN WAJIR

Due to numerous challenges faced by learners in this region education level is still very low compared to other regions in the country. Among the challenges faced by learners in this region are:

- Inadequate food supply/hunger hinder concentration of learners in class
- Lack of regular school attendance due to parents moving from one region to another in search of pasture for their livestock
- Most parents have no formal education and therefore cannot guide their children academically or offer close monitoring of academic progress
- Lack of electricity at home for private study
- Hot temperatures does not favour afternoon lessons
- Most teachers here are non locals who run away once there is a security threat. Time usually lost looking for teachers to replace them
- High cost of living in Wajir does not attract enough workmanship

GOAL

Our goal is that the WAJIR DIGITAL LIBRARY FOR MOBILE LEARNING project will enable students improve their study skills to the point where they can succeed in school and develop reading skills that will prepare them for post-secondary education.

INTERVENTION DONE BY FAULU SECONDARY SCHOOL

Despite the challenges at Faulu secondary school we strive to overcome the adversities by taking the following action:

- Offering psycho-social support to our staff to cope up with the harsh conditions
- Offering breakfast and mid-day meals in school whenever resources are available for both learners and teachers
- Organizing open forums for both the community, learners and teachers for bonding purposes
- Sourcing for learning materials from donors through programs like books harvest day or wiLearn
- Finding scholarships for bright learners from poor backgrounds
- Organizing trips purposely to expose our learners and teachers



BACKGROUND

During Corona virus outbreak the schools were closed. The teachers of Faulu engaged local radio station to reach out to learners with academic lessons. We have not had any resources to start with eLearning or distance learning courses. It has come to a great disadvantage for the learners to be disconnected from the internet where virtual class could take place. Despite the global information age being part of the Kenya society, our rural school has not yet received the chance to learn with digital media. It is high time to prepare our teachers and students for the 21st century education and the competency based curriculum (CBC) that the Kenya Government demands. Hence the Faulu Secondary School leadership is seeking for external support to establish a basic infrastructure with digital skills training.



Our strategic plans is to digitalise our library under the “WAJIR DIGITAL LIBRARY AND MOBILE LEARNING”, with the objective of assisting all of our at risk students increase their access to academic contents and to develop a culture of research as their peers in others parts of the country.

STATEMENT OF NEEDS

The Faulu Secondary School has 246 learners of which 97 have been determined to be at risk in their reading performance for variety of reasons including learning disabilities, such as attention deficit disorder (ADD) and dyslexia or other economic and language based difficulties. If these students are not given an opportunity to improve their study skills they are likely to be truant and drop out of school.



PROJECT OBJECTIVES

The objective is that by a period of one year all our students age 13 - 17 as beneficiaries of the mobile learning project improve their learning skills. The strategic decision to launch the WAJIR DIGITAL LIBRARY AND MOBILE LEARNING project is based on the latest research (ANNEX 2 Research Wanjala, G. PhD & Koriyow, H. EdD, 2017) that students lack learning resources both in school and at home. The school has 7 laptops with minimal content and no curriculum relevance thus is in need of the comprehensive library. With the integration of a digital learning platform at Faulu Secondary we anticipate enhanced teaching and learning skills that will lead to:

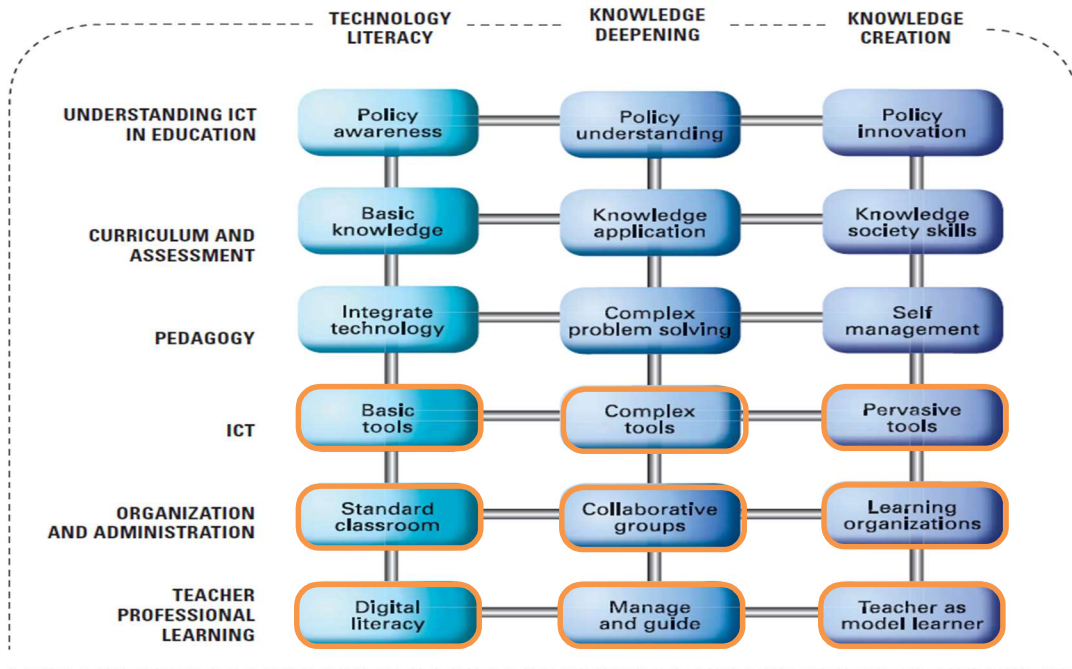
1. a measurable increase in reading speed, comprehension and reading attention span
2. enabling all students to access the general curriculum contents on digital media
3. developing a culture of enquiry based learning and research in students
4. embedded digital media and information technology in education

PROJECT DESCRIPTION

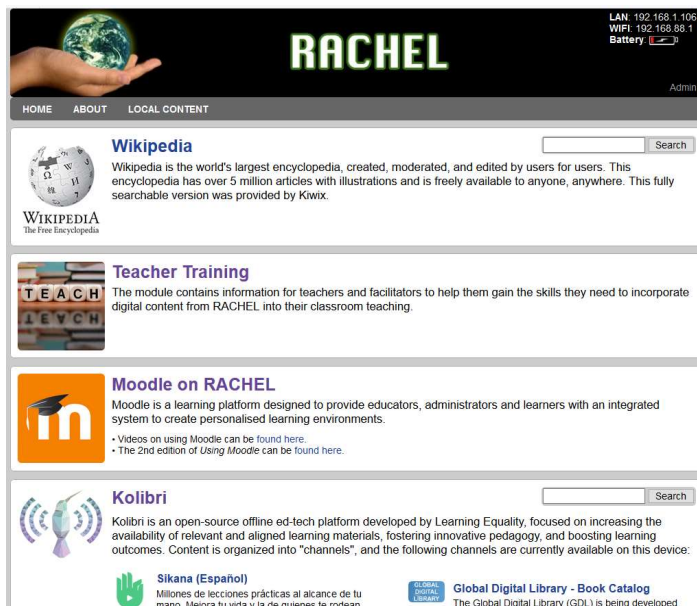
WAJIR DIGITAL LIBRARY FOR MOBILE LEARNING will establish a digital education platform. The offline information library will enable all students to access free quality education resources with classroom instruction on virtually all subjects required. Apps and software lessons will challenge and improve their reading skills as well as offering the opportunity to search for individual subjects of interests. The students will develop modern learning and research skills for school projects. It will help the individual learner to study at his own speed and obtain proficiency in the selected subjects. Regular use of technologies in education is child focused and liberating but may be disruptive in nature as old habits of teacher centered lessons will be challenged. This implies new teacher and learner roles, new skills, adapted pedagogies and new approaches to learning techniques. The project includes a 4 day workshop training for facilitators and classroom teachers on how to use the equipment effectively and guide the beneficiaries for effective reading.



The introductory workshop will focus on the familiarization with the wireless Learning Lab interactive (wiLLi) developed by wiLearn 4 Life containing the digital library in a portable solar power. The wiLearn workshops focus on the lower nine subjects of the UNESCO ICT competency framework and in line with the UN Sustainable Development Goal Nr. 4 leading to a more equitable access to quality education and life long learning practices.



Starting with ICT Basic tools familiarization the integration process from ICT literacy to knowledge creation depends on the regular access, practice, mentoring and continuation of a reflective learning process. The pre-configured WiFi server content is fully adaptable to local needs. The education resources based on



open source licences are free but curriculum aligned lessons optimized for self-oriented learning may come with a perpetual licence fee. The Kenya produced software enhancement is part of the initial project investment and will not produce further expenses. Learning modules contain all subjects required by the curriculum. Learning Management Systems can be used to make individual study assignments and follow up on learning progress. Digital Lessons will enhance the self-oriented learning skills which are seen as the key to a successful learning behavior in todays digital job world.



Sample server www.wilearn.ch



COHERENCE

National Sector Strategic Plan

The project is in line with government policy of integration of ICT in education and implementation of competence based curriculum (CBC).

Sustainable Development Goals – SDG 4

An offline digital library in Wajir will improve the access to modern eLearning lessons and digital media. It also enhances the opportunity for adults to practice life-long learning with media that is relevant to their environment.

EFFECTIVENESS

The Faulu secondary school has one ICT staff who is also in charge of computer lessons in school and shall help in the development of a web page. The staffs have smart phones that will complement 7 lap tops owned by the school. The digital library shall be a big boost to our radio lessons that we carry out collaboratively with Wajir Radio Community which is located few meters away from the school.

PROJECT SCHEDULE

TIMELINE	ACTIVITY
WEEK ONE MARCH	Acquisition of ICT materials and setting up the digital library.
WEEK TWO MARCH	Staff training and rolling out the project.

RISK and MITIGATION

The major risks anticipated in this project are grid power breaks. To mitigate these risks we shall mobilize for resources to install solar energy. Training shall also be offered to teachers who will stay for a longer period in The Faulu secondary school and teachers from the local community.

EXPECTED RESULTS

- Improvement in class work performance
- Improving retention rate for teachers
- Research oriented student ready for self-oriented learning
- Reduction in learner school dropouts
- Digital media competence and learning skills



EVALUATION

Standardized examination /test will be conducted at the start of the North Eastern Read program and end of the term to determine the effectiveness of the program. Thereafter stakeholders and other concerned parties will be provided with progress report.

SUSTAINABILITY & OWNERSHIP

The school has already set aside a classroom for the project with the sub county education officials endorsing the project because it shall be one of its kind in the whole of Wajir County and shall therefore assist in its sustainability. Willearn 4 life shall be the owner of the ICT Equipment and workshop training.

PARTNER SELECTION

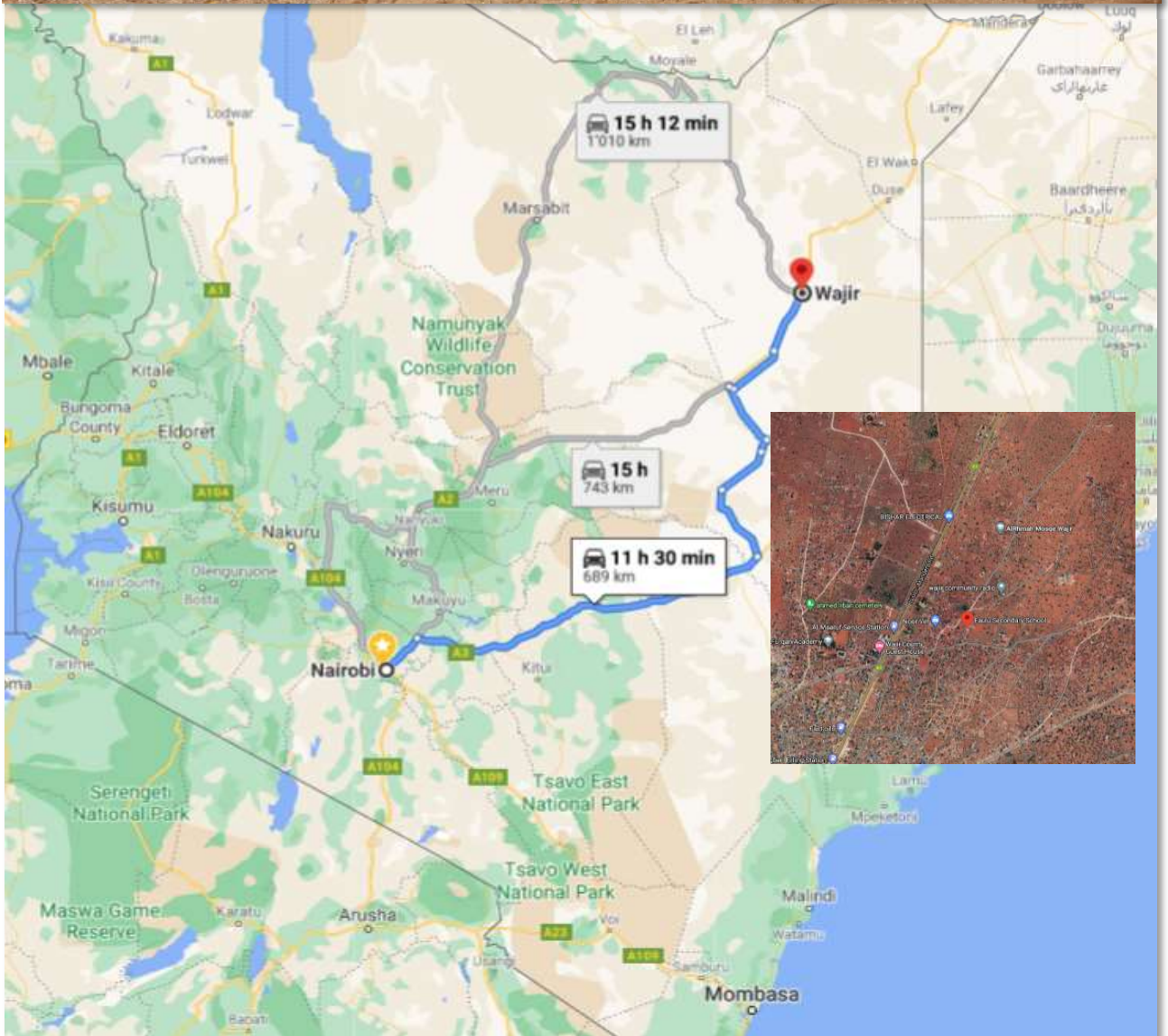
The Faulu secondary school selects and requests Willearn 4 life to be the technical partner in this project and assist in fundraising and implementation.

BUDGET SUMMARY

Activity	Description	USD
1.	Digital Library kit (moLLi)	4'900
2.	20 Tablets & 1 Laptop	4'000
2.	Teacher Training	3'200
3.	Logistics & Transport	2'500
Total	Project Budget	14'600



ANNEX 1 MAP





ANNEX 2 Research Paper

**IMPACT OF SUBSIDIZED FEES ON STUDENTS' ACCESS TO QUALITY EDUCATION
IN PUBLIC SECONDARY SCHOOLS IN WAJIR COUNTY, KENYA**

BY

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ABSTRACT

The purpose of this research was to establish the impact of implementing subsidized fees programme on students' access to quality education in public secondary schools, Wajir County. Free Tuition Secondary Education was launched by the Government of Kenya in 2008 to raise access by reducing the cost of secondary education in public secondary schools. Since its inception, though, concerns have been raised on whether its implementation had any impact on students' access to quality education. To address these concerns, this study sought to examine the influence of subsidized fees on student enrollment rate and academic performance. Using descriptive survey research design the study's target population consisted of 350 respondents comprised of 40 principals, 40 Boards of Management (BoM) chairpersons and all the 270 secondary school teachers in Wajir County. The sample size was 94 respondents, made up of 20 principals, 20 BoM chairpersons and 54 secondary school teachers..Data were collected using questionnaires, interviews, observation and document analysis. Quantitative data was analysed using descriptive and inferential statistics while qualitative data was analysed by organizing it thematically based on the objectives. The research study has established that even after the introduction of subsidized fee the enrolments rates remained low, because finances to support Free Tuition Secondary Education were inadequate and delayed before disbursement. .Consequently, the implementation of subsidized fees programme by the government of Kenya has not greatly influenced access to quality education in public secondary schools in Wajir County.

Key Words : Impact, Subsidized Fees, Access, Quality Education, Public Secondary Schools

1.1 INTRODUCTION

Literature shows that secondary education has two functions, one at individual level and the other at social level or what is referred to as private benefit and social benefit. According to Alvarez, (2000) at individual level, secondary education prepares youth for life in respect to personal development, preparation for the labour market and training for higher cognitive functioning. At social level it creates human and social capital for nation building. It also plays a role of redistributing income and wealth as well as alleviating poverty. Farmanesh, , (2005) further argues that secondary education greatly contributes towards acquiring global competitiveness and achievement of the the Millenium Development Goals (MDGs) He further stipulates that investing in youth provides the longest and most effective dividend towards meeting the MDGs by building the social capital needed to foster pragmatic development. Yet Secondary enrolment rates in sub Saharan Africa are the lowest in the world. Out of 104 million secondary school-age going children, for instance, only 25 percent were enrolled in school in 2006 (UNESCO, 2008). The gap in secondary School Net Enrollment between Sub-Sahara Africa and developed world average is 33 percent. According to UNESCO (2005) sub Saharan Africa has the lowest opportunity to enroll in secondary education.

The situation is made worse in countries like Kenya where schools may find it difficult to maintain students without funds and as a result, students are sent away to collect fees which sometimes result to dropouts; hence low enrolment (Republic of Kenya, 2009). Kenya was ranked 111 out of 148 countries in 2014 global competitiveness index in access to secondary education. Nevertheless, about 60.5 percent of the secondary school-age going population were not in school in 2013 (MOST, 2014). Moreover, over the years, enrolment has been low in Wajir despite free secondary education programme and this is the gap that this research wanted to examine.

1.1.1 The Economic and Social Benefits to students' Access to Secondary Education

In order to contextualise the impact of implementation of subsidised fee on students' access to quality secondary education, there is need to first understand the economic benefit of the level of education under study. In this case, there is need to understand the importance of investing in secondary level of education. Studies by Lewin (2006), Briseid and Caillods, (2004) World Bank, (2009), have shown that secondary education plays an important role in addressing the emerging human development concerns in countries which are engaged in building knowledgeso that their societies may stay connected to the globalisation process. World Bank, (2009) and Lewin, (2006) have argued that secondary education needs to be expanded in order to respond to increased social demand and also as a link between the primary level and the secondary level in every country. They also emphasised investing in secondary education in a bid to yield considerable social and economic returns that are crucial for national development.

According to UNESCO, (2011), a high proportion of the population has to have received secondary education for any economic growth to take place. More so, in a World Education Forum participants argued that no country can be expected to develop into a model open economy without having a certain proportion of its work force completing secondary education (UNESCO, 2011). Alvarez, (2001) adds that over emphasising on primary education may results in producing labour which is educationally behind the anticipated level of industrial development.while Watkins, (2012) argues that without a sustained improvement in coverage and quality of secondary education, developing countries will fall further behind relative to developed countries.

Secondary education has also been viewed functionally in relation to electing a democratic government. USAID,(2000) suggests that for democracies to survive, their citizens must be educated so that they are able to understand difficult issues, make informed decisions, and hold

officials accountable for their actions. The report by USAID, (2000) also argues that Secondary education increases the voice of the poor, particularly at the local level, where the poor gain the self-confidence needed to engage in dialogue and influence decisions. Secondary education raises young people's awareness of their civil rights and responsibilities and encourages a sense of national loyalty

1.1.2 Subsidized Fees and Access to Quality Secondary Education in Africa

The demand for secondary education is increasing in most of the developing countries (Verspoor, 2008). This may have created challenges in planning for access to quality secondary education especially during implementation of the fees subsidy programme provided by government. In Benin according to the World Bank (2007), about 250,000 students of primary school attended government funded secondary schools in 1987. In most these schools, tuition was free but parents paid entrance fee and uniform. In 2007, Uganda made secondary education free, and is likely to achieve Millennium Development Goal for education in 2015 (World Bank, 2008). According to the ministry of education in Uganda, there are more than half a million secondary school children who are studying under the USE policy in some 1471 schools. This is a vast improvement in terms of students access to secondary schools. However, the quality of education provided to students is still questionable even as government tries to offer new subsidies to cover education related costs.

Subsidised fees programme in secondary education was also introduced in Mauritius. According to Suddho (2001) in Mauritius prior to 1977, only scholarship winners of primary school-leaving examinations were entitled to free education in state schools. Non-Scholarship winners are allocated a few places with a moderate fee ranging from Rs 10 per month for form one to Rs 40 per month for form four. The government of Mauritius promoted basic education as part of its social-economic development strategy. The education is tuition free with parents paying for extra tuition, uniform and textbooks, fifty two per cent of the children receive secondary education which takes 7 years. Consequently, the pupil/teacher ratio was higher in public than in private schools due to the wide range of subjects offered in state schools.

According to UNESCO (2005) the government of Zimbabwe introduced subsidized fees in secondary education where the government allocate resources for payment of teachers 'salaries and purchase of school books and equipment on the basis of the number of subjects. As a result, topics were rationalized, examinations localized and science teaching improved. The government also provides for construction of school buildings, maintenance, salaries of all staff and all other materials and running expenses in public schools. The UNESCO report also shows that the free education programme in Zimbabwe is 80 percent a success. In Nigeria, senior secondary students are required to purchase textbooks and uniforms. (www.wikipedia.com) and according to Fafunwa (2010) there has enabled increased access resulting in large number of overcrowded classrooms. In Egypt financing of secondary education is the responsibility of the government, however, due to inadequate finances quality is adversely affected (Zahir, 2006).

1.1.3. Subsidized Fees and Access to Quality Secondary Education in Kenya

Abagi (2002), argues that the successful introduction of free primary education led to increase in enrolment levels. This consequently led increased class sizes where classroom management and effective teaching become difficult. As a result the quality of learning at subsequent levels of access is negatively affected. However, Colelough and Lewin, (1993) held a different view by suggesting government can introduce free schooling without affecting the quality of education by embracing mechanisms such as widely distributing schooling facilities throughout the country, distributing free

textbook in schools, developing curricula that meet the needs of learners as well as embracing quality teacher training and in-service programmes.

The monitoring and evaluation of Free Secondary Education (FSE) team of the Ministry of Education in October 2010 reported that enrolment had increased since the inception of subsidized Secondary School funding (MOE, 2010). There was therefore serious congestion in the classrooms, acute shortage of teachers and inadequate infrastructure such as laboratories, libraries and classrooms. Interestingly, 92.5 percent of the parents were not ready to pay levies to schools when education is free; hence, making it difficult for schools to create a conducive learning environment.

1.2 STATEMENT OF THE PROBLEM

In an effort to enhance the policy in secondary education related to improving relevance and expansion of student access to quality education through reduced indirect cost to the parents, the Government of Kenya introduced a subsidized fees programme in public Secondary schools in 2008. Since then, there have been concerns that public secondary schools are increasing fees and other fees levies ignoring government subsidized fees programme (MOEST, 2009). After introduction of Subsidized fees programme in Secondary schools in Kenya, enrolment increased from 1,030,080 students in 2006 to 2.1 million students in 2014 while number of schools increased from 5,600 in 2009 to 7,325 in 2014 an increase of 30.8 percent, (MOE statistics section of 2015). Despite the government of Kenya investing 23 percent of the total government revenue on education sector, transition rate in secondary school is still at 74.6 percent (MoE, 2014). For instance, the teaching and learning facilities in Wajir have remained static over the years, lowering the standard of student access to quality education (County Director, Wajir, 2014). According to the County Director of Education Wajir County (2014), out of children at the age of 14-19 who are the secondary school going age, 87 percent are not attending school regularly. This maybe due to financial constraint since government, subsidized fees contribute less compared to fees that should be paid by parents (CDE Wajir, 2014). According to the Development plan in Wajir DEO's office (2008-2012), most parents experience problems of meeting their obligation towards financing of their children's education. As a result, academic standards are declining as evidenced in the national examinations KCSE results (2012) where out of 47 Counties, Wajir was ranked as position 41 and in 2013, it was ranked at position 44 (Wajir County, Director of Education, 2014). However, there is no study done so far to establish if government fee subsidy programme is achieving desired goals of improving students access to quality education in Wajir County. This study therefore sought to establish the impact of subsidized fees on students' access to quality education in public secondary schools in Wajir County.

2.1. RESEARCH METHODOLOGY

2.1.1 Research Design

Descriptive survey design was appropriate for this research because it enabled the collection of in depth qualitative and quantitative data, from the current situation in a natural setting on the extent of the impact of government-subsidized fees on student access to quality secondary education by schools in Wajir County.

2.1.2 Target Population

The target population for this research consisted of public secondary schools in the four sub-counties of Wajir County. There are 270 teachers in the four sub-counties of Wajir County with

approximate student population of 9488 in 40 public schools (CDE, statistic section, 2014). At the time of data collection, there were 40 secondary school principals who have vast experience and knowledge on resource use in the implementation of subsidized fees programme as well as 40 chairpersons of school Board of Management who are policy makers at the school level and have desirable skills and knowledge acquired through training on implementation of government subsidized fees programme.

2.1.3 Sampling Techniques and Sample Size

In determining the sample size for this study, Stratified random sampling was used to cluster the schools into four sub-counties; Wajir South, Wajir East, Wajir North and Wajir West. Each sub county was then stratified into types and categories of schools that is, boys boarding, girls boarding and mixed day. Every stratum was presented by a sample, which is 20% of its population. Purposive and random sampling techniques were used to get the actual male and female teachers. Through simple random sampling, 54 teachers were selected based on the 20% rule. 50% of the principals and BoM chairpersons were selected using purposive sampling because they are few in number and they have adequate insight on the extent of the implementation of the Government subsidized fees programme. The total sample size for the study was 94 respondents as shown in Table 1. and Table 2.

Table .1: Population and Sample size of BOM chairpersons, principals and teachers

Sub county	No. Principals target population	Principal sampled 50%	No. teachers population		Teachers sampled 20%		BOM chair persons target population	Selected BOM chair persons Sampled 50%
			M	F	M	F		
Wajir West	8	4	30	20	6	4	8	4
Wajir East	12	6	60	30	12	6	12	6
Wajir South	11	6	52	18	9	5	11	6
Wajir North	9	4	48	12	8	4	9	4
Total	40	20	190	80	35	19	40	20

Table 2: Category of sample size of schools

Sub-county	N	Boys	B _n	Girls	G _n	Mix Day	MD _n
Wajir West	8	4	2	2	1	2	1
Wajir East	12	6	3	2	1	4	2
Wajir South	11	5	2	2	1	4	2
Wajir North	9	4	2	3	1	2	1
Total	40	19	11	9	4	12	6

Key: N = Sub county schools population, B_n -Boys boarding school samples G_n -Girls boarding school sample MD_n – Mixed day sample

2.1.4 Research Instruments

The data for this research were collected using (1) questionnaire, (2) interviews (3) observation and (4) document analysis. The questionnaire for the principals was centred on subsidized fees management, academic performance, procurement of teaching and learning materials and student enrolment rates. The questionnaire for the teachers was designed to capture information on qualification and experience in contributing to the successful implementation of the subsidized fees programme. Open-ended questionnaire items enabled us to obtain information relating to the respondents' opinion on issues. The interview methods provided for in-depth probing of respondents regarding the impact of subsidized fees on student access to quality secondary education in public schools in Wajir. Observation checklist was used to get information on the availability and state of resources materials and facilities. Documents study checklist indicated availability, inadequacy, state of documents on fees structures, circulars and exam analysis, parent day minutes; quantities, quality of resources and how they were used to implement access to quality education in Wajir.

2.1.5 Research Objectives and Research Questions

The objectives of the research study were:

- i. To establish the effect of subsidized fees on enrolment rate in public secondary schools in Wajir County.
- ii. To determine the impact of subsidized fees on student academic performance in Wajir County, Kenya.

To achieve the said objectives, the research was guided by the following questions

- i. To what extent does implementation of subsidized fees impact on enrolment of students in public secondary schools in Wajir County?
- ii. To what extent are subsidized fees influencing student academic performance in Wajir County, Kenya?

3.1. RESEARCH FINDINGS AND DISCUSSION

Out of 20 questionnaires administered to the school principals, 16 of them were returned making a questionnaire return rate for the principals to be 80 percent. For the teachers 39 out of 54 questionnaires were returned and for the BOM 16 out of 20 questionnaires were returned. Out of 94 questionnaires administered to all the respondents, 71 of them were returned making a total questionnaire rate to be 75.5 percent. The return rate of 75.5 percent was considered representative enough. and adequate for analyzing and reporting results.

3.1.1 Research Question1 : To what extent does implementation of subsidized fees impact on enrolment of students in public secondary schools in Wajir County?

The first objective sought to establish the effect of fees subsidy programme introduced by the Government of Kenya on enrolment in public secondary schools. The results are presented in Table 3.

Table 3 : Principals' response on students' enrolment in public secondary schools

Year	2008	2009	2010	2011	2012	2013	2014
Mean enrolment	142	219	199	193	272	372	301
Enrolment rate		54.03	-9.05	-3.02	41.03	36.65	-19.09

Table 3 , indicates that the mean enrolment rate in public secondary school in Wajir County has been fluctuating from the year 2008 to 2014. There is no clear pattern of enrolment, which can be described as either increasing or decreasing. Using 2008 as the base year, it is clear that the enrolment rates increased by 54% in the following year and decreased by 9% in the subsequent year. This is as an indication that even after the introduction of subsidized secondary education enrolment rates have not stabilized in Wajir County. The numbers show that government subsidized fees has not yet promoted secondary school education enrolment implying that students are still out of schools as evidenced by low access rate annually. To establish whether the subsidy programme by the government is helping in student's retention in schools to enhance access, the research sought the frequency of student's dropouts. The findings are as presented in Table 4.

Table 4.: BOM chairpersons' responses on frequency of student drop out from school

Student drop out	N	%
High drop out	8	50
Moderate drop out	6	37.7
Low drop out	2	12.3
Total	16	100

Implementation of government-subsidized fees to encourage enrolment is still not yet bearing much fruits as the policy makers anticipated. As shown in Table 4 despite the programme, there is a continued student drop out from schools which rates compromise enrolment and access to education as students stay at home due to poverty of their parents. The results on low enrolments rates mirrors a study by Mutegi (2005) which indicated that there is a significant relationship between unit cost of education and students' enrolment rates in Arid and Semi-Arid areas in Kenya,. Coady and Parker (2002) in Mexico gave similar suggestions by asserting that high fees in secondary school had a consistently large negative effect on enrolment as students are sent home and thus not enhancing access. The research also examined five aspects as indicators of improved student enrolment. The results are as shown in Table 5

Table 5 : Principals responses on aspects that encourage student enrolment

Aspects	Responses	n	%
There has been timely disbursement of fees by the government to encourage enrolment	Yes	1	6.3
	No	15	93.7
	Total	16	100
Government subsidized fees is sufficient to sustain students in school	Yes	3	18.7
	No	13	81.3
	Total	16	100
School has been receiving adequate bursary and CDF funds for needy students to encourage enrolment	Yes	3	18.7
	No	13	81.3
	Total	16	100
Government subsidized fees and other grants has transformed the attitude of students and parents to enhance enrolment	Yes	6	37.5
	No	10	62.5
	Total	16	100
There has been reduced number of students drop outs because of fees	Yes	7	43.7
	No	9	56.3
	Total	16	16

From Table 5, 93.7% of the principals reported that; there has not been timely disbursement of fees by the government to encourage enrolment. The rest said that government subsidized fees is insufficient to sustain students in school while the vast majority also said that schools have not been receiving adequate bursary and CDF funds for needy students to encourage enrolment however, a small group of the school principals asserted the government subsidized fees and other grants has transformed the attitude of students and parents to enhance enrolment. The results also indicate that there has been no reduction in the number of students dropouts because of fees. It can be concluded that factors such as late disbursement of funds, insufficient funds, and inadequate CDF kitty keeps students out of school in Wajir County. Untimely disbursement of fees has more reaching impact on access as without money to meet the direct cost of administration; principals are forced to send students home to collect fees from their poor parents. The subsidy programme has not been able to retain the students in school because of its insufficiency. In addition, the bursaries and CDFs that is supposed to aid needy students to access education has not been adequate enough to retain them in school.

The findings on the government subsidy not being sufficient to support secondary education concurs with a study by Mutege (2015) who established that households spent more money on children who are in secondary school than the government. This aspect of parents spending more makes children drop out of school hence being denied a chance to participate in secondary education. Mutege (2015) further established that, unit cost of education highly correlate with enrolment at ($r.834$ and $P<0.05$) for the households and ($r.744$ and $P<0.05$) for the government an indication that a child is more likely not to enroll in secondary school when household expenditure is higher than the government expenditure.

A chi-square test was run to establish whether there is a statistically significant relationship between subsidized fees and enrolment rate in public secondary schools. Variables such as adequacy of the funds, timeliness of the disbursement of the funds and availability of CDF as a supplement were tested against enrolments. The results are as presented in Table 6.

Table 6 : Chi-square test on access and student enrolment

Aspects	Value	Df	P-value
There has been timely disbursement of fees by the government to encourage enrolment	12.17	1	0.000
Government subsidized fees is sufficient to sustain students in school	9	1	0.003
school has been receiving adequate bursary and CDF funds for needy students to encourage enrolment	2.4	1	0.121
Government subsidized fees and other grants has transformed the attitude of students and parents to enhance enrolment	4.267	1	0.039
There has been reduced number of students drop outs because of fees	4	1	0.046

The results in Table 6 show that all the variables had a p value ($p < 0.05$) an indication that schools which experience timely disbursement of fees by the government, receive sufficient subsidized fees, with transformed attitude of students and parents, and have reduced number of student dropouts experience an enhanced student's access. Timely disbursement of fees has a much greater influence on student's access as it has a p-value of 0.000. This is because once government releases money to schools in time, there will be sufficient funds to meet direct cost of administration by principals and thus no urgency of sending students home. On the contrary Bursaries and CDFs did not show a significant relationship with access based on this data, however from the descriptive statistics we have seen that it does encourages student's access.

3.1.2. Research Question 2 : To what extent are subsidized fees influencing student academic performance in Wajir County, Kenya?

One of the objectives of the research was to establish the impact of fees subsidy programme on provision of quality education in secondary schools. Access to quality grades was described in terms of grades attained by students at the end of study period. The findings per schools category are tabulated in Table 7

Table 7 : Performances in KCSE, 2010-2015, Wajir County

School category	No. of schools	2010		2011		2012		2013		2014		2015	
		M	G	M	G	M	G	M	G	M	G	M	G
Boys boarding	7	3.705	D+	2.6	D	3.5	D+	3.756	D+	4.71	C-	4.85	C-
Girls boarding	5	3.01	D	2.4	D-	3.42	D	3.43	D	3.45	D	4.23	D+
Mixed day	4	2.42	D+	3.4	D	3.50	D+	3.24	D	3.26	D	3.57	D+

From Table 7, it is evident that although the government introduced subsidized fees programme to enhance access and support attainment of good grades, most schools are registering an average KCSE mean score of 3.4 in the last six years from 2010-2015. It is also worth noting that the overall performance in KCSE examination by schools in Wajir District from year 2010 to 2015 was low. The mean grades attained by majority of the schools ranged between 2.4 to 4.8 and no school had

C+ as mean grade, which is entry grade for the university. It is evident that even after the subsidized fees the school performance remained below average of grade C in Wajir County. The findings of this study on the fees subsidy programme on provision of quality education in secondary schools agrees with earlier research conducted by MOE (2009) which also shows that girls boarding and mixed day are mostly affected with low quality grades.

The research sought the opinion of the principals on the effects of introduction of subsidized fees on general students' academic performance. A majority of them (56.1%) believe that the implementation of subsidized fees programme has no noticeable change on students' academic performance in Wajir county. Academic performance has not improved much due to inadequate teaching and learning materials, low transition from one class to another as well as high dropout rate, since they cannot meet their education expenses. In addition, respondents were also asked to indicate the frequency at which students are sent home to collect school fees. Sending students out of school for a long period denies them a chance to concentrate in schoolwork and minimizes students teachers contact hours. The results on the frequency of school principal sending students home is as presented Table 8

Table 8 BOM chairpersons' responses on frequency of students sent home for fees

Student frequency of sent home	N	%
Monthly	13	81.2
After two weeks	2	12.5
Weekly	1	6.3
Never sent home	0	0
Total	16	100

From Table 8, it can be deduced that most of students are at least sent home every month for school fees. This clearly shows how learning time is going to waste, and thus compromising the quality of schooling outcomes. This is contrary to the expectation of government, which introduced subsidized fee programme to enhance access and retention of students in schools. This finding concurs with studies carried out by Mwinzi and Kimengi (2006) and Mensch and Lloyd (1997) in Kenya indicating that students are being sent home frequently to collect fees balance despite government-subsidized fees which in turn interferes with students learning and their academic performance. On average students take up one week per month to report back to school, in total the student ends up missing an average of one month per term, which translate to one term per year

In order to establish the influence of fees subsidy programme on provision of quality education in secondary schools, a chi-square test was employed. This was done with the aim of establishing whether there is any statistical significance of parents and government involvement on supplementing the subsidy programme and student academic performance. The results are reported in Table 9.

Table9: Chi-square test on variables contributing to access and students' academic performance

Aspects	Value	Df	P-value
Parents have been able to fund the construction of physical facilities e.g. classes, dorms , labs etc to promote good learning environment	4.557	1	0.033
Government has been able to provide adequate funds to enable students obtain good grades	9.01	1	0.033
Students have been frequently sent home to collect school hence negatively affecting academic performance	4.267	1	0.039
Government subsidized fees has been sufficient to acquire teaching and learning materials to enhance academic performance	12.18	1	0.000

From Table 9, chi-square test gives a p-value of $p < 0.05$, an indication that there is statistically significant relationship between all variables contributing to access to secondary education in relation to government subsidy and student performance. This implies that schools which have inadequate financing by parents and government have low revenue base, therefore high frequency of sending students home for fees, and consequently poor performance in national examination. The most significant aspect that greatly influence students access through promoting quality students' academic performance is acquisition of sufficient teaching and learning materials in schools as indicated by (p value= 0.000). The results are also supported by Development plan in Wajir DEO's office (2008-2012), which indicated that most parents experience problems of meeting their obligation towards financing their children's education. As a result, academic standards are declining as evidenced in the national examinations KCSE results (2012) where out of 47 Counties, Wajir was ranked position 41 and in 2013, and position 44 in the year 2014, (Wajir County, Director of Education, 2014).

4.1.CONCLUSIONS AND RECOMMENDATIONS

4.1.1 Conclusion

In conclusion, the research has established that, there is still low enrolment rate as a majority of the school-age population is out of school. Implementation of government-subsidized fees has not yet encouraged students to come to school. Chi-square correlation coefficient established a positive relationship between subsidized fees and student access in Wajir County since the inability of parents to pay high school fees levied by principals in schools, coupled with delays and insufficiency. of government subsidies make it difficult for schools to acquire quality teaching and learning materials that can enhance access and good grades

The research has also established that, student academic performance is continuing to be low despite the introduction of the subsidized fees programme. This is because learning time is wasted at home for those who are sent to collect fees, while those who are in school do not have sufficient learning and teaching materials to encourage learning. Physical facilities are also not adequate to support students' academic performance as there is straining to share the few available in schools, which are either insufficient or poorly maintained.

4.1.2 Recommendations

Based on the findings of this research study, the following recommendations are made to the implementers of government-subsidized fees programme .

- i) Government should ensure that there is timely and adequate disbursement of subsidized fees to schools not based on enrolment rates of students but needs of each regional poverty levels.
- ii) Training be conducted for both BOM and principals on proper planning and effective implementation of subsidized fees to encourage access
- iii) Government should increase subsidize fees particularly target the poor in arid and semi-arid areas.

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