

## **Challenges of Social and Spill-Over Benefits as Motivating Factors to Investment in Formal Education in selected countries of Ghana, Kenya and Rwanda**

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**Abstract:** This study sought to examine the challenges of social and spill-over benefits as motivating factors to investment in formal education in selected countries of Ghana, Kenya and Rwanda. The main argument in the paper is that investment in education is serious business and is an imperative led by the fact that education holds returns and externalities to society at large. The study was premised on human capital theory. A desk research design that reviewed secondary data from local and international publications on social and spill over benefits of education was adopted focusing on Ghana, Kenya and Rwanda. The findings indicate that education is considered as a key sector not only in the selected countries but also in other developing nations. It was also evident that priority was placed mostly on primary and secondary education gauged by the considerable public financial resource allocation to these sectors. The major challenges include limited financial ability, competitive needs, and national global trends, amongst others. The study concluded that although these countries were striving to become democratic, self-reliant and middle income nations by conquering long terms set visions, it is imperative to invest substantially in TVET and higher education. It was recommended that there was need for concerted efforts among the private sector, local community and any further potential stakeholder to support these governments' efforts as they also enjoy the educational returns. The way forward for Ghana, Kenya and Rwanda is to put in place strong institutions that effectively and rationally ensure the prudent use of all available resources towards maximum educational outputs [259 words].  
**Key words:** Social Benefits, Spill-over Benefits, Private Rate of Returns, Cost- Benefit Analysis in Education, Africa, Ghana, Kenya, Rwanda.

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### **I. Introduction**

#### **Background to the Study**

The main argument in this paper is that although investment in education is serious business and is an imperative led by the fact that education holds returns and externalities to society at large, it is fraught with multifarious and intertwined challenges. There is an undeniable linkage between education and national economic performance (UNESCO, 2006) hence for any society to develop and prosper education is embraced as key. Education is therefore considered as a social investment since its social and spillover benefits outweigh what individuals gain as private returns (Woodhall, 2004). Therefore, these positive externalities from education (Hall, 2006) are the prime justification as to why societies and governments should continually invest more in education. Undisputedly, apart from the social benefits, educational investments lead to substantive spill-over benefits or externalities. Spill-over benefits of education implies what the surrounding community copy, learn and gain from an educated person (King, 2007). This may be reflected in wealth, health, and feeding, living conditions among others. Such benefits overflow to other people other than single educated individuals or their families (Burton, 1963). Stated differently, educational returns diffuse to reach even other members of society (Gieyoung & Chong, 2013).

A deep analysis of the externalities from education can be borrowed from Moretti (2004) who emphasized that human capital externalities are ample to the extent of being a major contributor to the existing differences between poor and rich countries in long-run growth rates. In line with this, Hungerford and Wassmer (2004) certify that educational externalities were among the underlying contributing factors over the increasing rate of employment, mushrooming of businesses, and raising in personal income and housing values. These educational externalities are also valued in working environments. Niehaus (2012) commends spillovers by showing the extent to which educating a worker increases what others are able to borrow or learn from him/her. Research by Kessler and Lulfesmann (2002) shows that investment specifically in employee's training was motivated by the gaining of skills and experiences that would wholly benefit organization.

In line with the foregoing, the governments' commitments to invest in education were documented in different contexts. In the United States of America, Karoly and Bigelow (2005) have demonstrated that in California and other states, there was a gradual increase in the level of policymakers' awareness of the need to offer an open access to publicly funded preschools as a result of the anticipated prospective benefits from this level of education to the largest society. In Australia, a study carried out by Murray (2007) has clearly outlined the significance for educational public funding. This was a reaction to the ongoing current trend of viewing tertiary education as a private entity rather than a public good, which contrasted with the private investors' point of view to work closer with the community which ultimately serves them as stakeholder, manpower and clients.

In Europe, a study carried out by Green et al. (2003) has concluded that there is a positive correlation between education and social cohesion. Specifically in Germany as Bauer and Vorell (2010) assert, the positive externalities have always been the striking reason that the government presents as justifications during the allocation of funds to the educational system. In Africa, the social and spill-over benefits are also known and valued. It is in this respect for instance that in Senegal, educational investments are gauged in terms of increase in productivity, spread of knowledge, organizational strength and people's openness to international scene (Seck, 2009). In Ethiopia, the social and spill-over benefits of education are exceptionally valued to the extent that since the early 1990's there are no charges levied on students who enroll for higher education (Chapman, 1999). It is against this backdrop that this paper sought to examine the main challenges of social and spill-over benefits as motivating factors to investment in formal education in selected countries of Ghana, Kenya and Rwanda.

## **II. Literature Review**

Educational financing involves the sacrifice of alternative possible investments. For instance, instead of gaining more qualification after bachelor degree, one may decide to use his resources (time, money and physical energy) in business. This brings about the concept of opportunity cost (Sidorkin, 2007) for both individual and to the society or government. However, the rates of return on schooling, the social and spill-over benefits from education still outweigh the educational costs. Hence, the opportunity cost is not much opposing the educational investments because education holds both quantitative and qualitative benefits (Woodhall, 2004).

In fact, besides the quantifiable educational outputs measured, for instance in terms of graduation rates, education reflects qualitative benefits to individuals themselves and to the society at large. In reference to individuals, Hill, Hoffman and Rex (2005) have shown that one's education level is a determinant to the "private rate of returns" translated into social consideration, earnings, salaries, achievements and further life enjoyments. At the society level, Hall (2006) points out civic participation and creation/adoption of new technologies as two major qualitative positive externalities from education. Further societal benefits apart from better educated population include the substantial progressive decrease of unemployment rates, increase in productivity, tax revenue and hence GDP and lowering of crime rates (Becker, 1975). Therefore, the nature of having both private and social aspects of educational benefits is to be highly appreciated and acknowledged as this heterogeneity character Marginson (2007), optimizes not only the educational returns in general but also determine their interrelationship nature whereby the social benefits eventually raise the private benefits of some other individuals eventually (McMahon, 2006).

With regards to educational returns and its impact to society, literature indicates that investing in education is one of the best choices that people and societies may ever make (Cattan & Crawford, 2013; McMahon, 2010; Owen, 2004; Orazem, 2012). Given the fact education empowers its beneficiaries with skills, knowledge and potentials; these ultimately turn into tangible personal and social capitals that accrue health and socio-economic status (Murray, 2007). It is on the basis of such evidences that investigation by Orazem (2012) led to establishing a clear link between schooling in developing countries with economic progress and autonomy.

Education is a driving force to economic growth (Cattan & Crawford, 2013) and therefore policy makers ought to acknowledge its benefits. In fact, although education increase the wages, prosperous, wealth and health of its beneficiaries in terms of private returns, education has external returns that reach others in terms of externalities or spill-overs. These educational externalities also known as spill-overs constitute what is coined as public benefits of education because they benefit existing and forthcoming generations in terms of democracy, human rights, better governance, trade, political stability, longevity (McMahon, 2010) among others. As evidence to externalities, Tengtrakul and Peha (2010)'s study has shown that the availability of computer in primary schools has boosted the availability and use of computers in households.

Furthermore, education acknowledges both monetary and non-monetary returns that together constitute the key contributors to GDP in direct and indirect ways (Owens, 2004). This consideration has incited on one hand scholars to document more about human capital externalities as a prime leading factor to productivity and economic growth and on the other hand governments to raise up investments in education as they strive to build up knowledge-based societies and competitive economies worldwide (Bauer & Vorell, 2010). The need for gender sensitivity in education supply is a current concern. It is in this respect that a study carried by Rihani,

Kays and Psaki (2006) has underlined key major benefits of girls' secondary education including increase of access to education, democratic change, and decline of infant mortality, mitigation of HIV and AIDS and finally poverty alleviation.

Despite the critical importance of education in socio-economic and social as well as personal development, the African continent is still struggling to address the issues related to educational realizations. Findings by Rihani, Kays and Psaki (2006) show that despite the considerable efforts especially in primary schools' enrolments, the completion rate remains low and a few primary school leavers undertake secondary school studies. Furthermore, young ladies still have little chances to access and remain in school especially in sub-Saharan Africa where only 17 percent of the girls are reported to be enrolled in secondary school. Such phenomena are attributed to mentality, poverty, corruption and poor funds' management (Rihani, Kays & Psaki, 2006).

According to Orazem (2012), the situation is worse to the extent that the largest majority of children in poorest countries fail to complete the primary cycle due to extensive corruption, criminality, wars and poor funding. In addition to these, the issue of educational quality remains a major threat. In fact, as per Education International-EI (nd) report, the issues of teacher recruitment, working conditions, inadequate remunerations and un-honored external financial aids impact negatively on the educational systems in Africa. The same report goes further to point out that in some locations, educational institution are forced to employ unqualified and underpaid contract teachers who lack proper pedagogy skills and career prospects, which gradually deteriorate the image and the quality of education. Such embarrassing situation lead eventually to the substantial cut off funds for certain levels of education starting by higher education and far more to the absolute neglect of others as it is most likely the case of Early Childhood Education (ECE) programs.

In various scholarly texts (Cunningham, 2013; Babalola, 2003; Coleman & James, 1990), everyday communication and in political and educational discourses, education is pointed out as a key sector for development. This reinforces Aristotle's thinking who claimed that education is the best provision for old age (University of Carolina, 2009). It also fulfills: the World Bank recognition of education as a strong baseline towards sustained economic growth (Gilead, 2012), the Education For All (EFA) goals and the Millennium Development Goals (MDGs) goals in which education remains the corner stone (UNDP, 2013).

### **Statement of the problem**

Despite the perceived role of education in development, it is disturbing to note from the emerging literature that some African developing countries have not accorded the required credence to education and ranked it as a prime sector to be funded notwithstanding its expectations and transformative potentials. As a result, most countries have not devised viable in-house initiatives and models to be used in educational funding. These apparent shortcomings have created gaps and challenges in their respective education systems. For instance, in Kenya, with the National Government Budget of Ksh 1.54 trillion in 2014/2015, education was only given 20% (Institute of Economic Affairs, 2014); In Rwanda, during the fiscal year 2013/2014, with a national capital investment of Frw 803 billion, education was ranked third (80.1 billion) (Republic of Rwanda, 2013). The foregoing educational funding rates heighten the concern about educational goals' attainments. There is therefore inevitable need for African researchers to reflect upon their contexts, and attempt to analyze the challenges confronting African countries.

### **Purpose and Objectives of the Study**

The purpose of this study was to examine the main challenges of social and spill-over benefits as motivating factors to investment in formal education in selected countries of Ghana, Kenya and Rwanda. The two objectives that guided the study were:

1. Determine the in-house alternatives and models used in educational funding and support in Ghana, Kenya and Rwanda
2. Identify the possible gaps and challenges in social investments to education and proposed remedies.

### **Theoretical framework**

This study was inspired by the theory of human capital of which development is traced back to Adam Smith. His ideas were embraced in the early 1960s by the American economist Theodore W. Schultz who actually invented the term "human capital" to reflect the prolific knowledge and skills of the workers. More theoretical advancements of this theory were made by Gary S. Becker, a former student and disciple of Schultz who argued that investment in human beings was the most valuable of all capitals (Becker, 1975). In other words, the emergence of human capital theory was a kind of revolution intending to draw attention to other resources than the physical ones such as natural resources, infrastructure, buildings and machinery focus which are at the end of the day operated on or simple creations of human power. Also true is the fact that theory

intended to provide theoretical and philosophical justifications to the human potentials and skills that ultimately make their difference in earnings (Becker, 1962).

This theory was chosen to be used in this study for four major reasons. The first one is that human capital theory has extensively been used as a guide towards educational policy formulation (Gilead, 2009). The second is that education is considered as one of human capital (Walters, 2004) since human beings' expertise and potentials are much a result of education, training and development (Walker, 2005). The third one is that human capital theory reflects a production process which requires expenditure and inputs (Erosa, Koreshkova & Restuccia, 2010). The fourth one is that this theory particularly emphasizes on education as being a formal investment whereby more education generally means higher lifetime income or higher future earnings (Sidorkin, 2007).

### **Research methodology**

The study used primarily documentary-descriptive approaches whereby practices, figures and facts about educational systems in Ghana, Kenya and Rwanda were gathered and analyzed one by one. However, in order to make meaningful conclusions, data in the above named countries were put under broad themes (Amin, 2005) to enable a thematic-comparative kind of analysis to take place. The discussion was guided by a proven academic knowledge of the researchers about the educational systems of concerned countries paired with thoroughly reviewed literature around the issues of educational funding, social and spill-over benefits of education under study (Orodho, 2009).

## **III. Findings And Discussion**

### **In-house alternatives and models used in educational funding and support**

#### **Ghana**

Funding of education has been a major issue for most African countries and Ghana is no exception. The major source of educational financing in Ghana has been the government of Ghana. Various national budget statements have allocated the greatest chunk of the national cake to the education sector. It is important to note that the Central Government is the predominant source of education funding. For instance, the three domestic sources of public funding together financed 93.5% of the total public spending on education in 2009. The remaining amount (6.5%) included funding from donors and other external sources (Government of Ghana, 2010).

Funding of education at the basic level is almost totally the responsibility of the government through the Free Compulsory Universal Basic Education (FCUBE) program. The government therefore provides financial support in the form of Capitation Grant to the schools to facilitate education delivery at the local school level. In the 2012/2013 financial year alone, the Ministry of Finance provided Capitation Grant for 5,741,198 pupils in Public Basic Schools for the 2012/2013 academic year and subsidized the registration cost of 391,079 candidates for the Basic Education Certificate Examination.

The needed infrastructural facilities such as the classroom blocks, toilet facilities, playing fields as well as stationery for effective academic work are also provided by the government. For instance, about 32 million exercise books were distributed to Basic Schools across the country, benefiting 4,768,806 pupils while 170,221 pupils, in selected deprived communities, benefited from free school uniforms in 2013 alone (Government of Ghana, 2014). Salaries of teachers are also borne totally by the central government. In addition to these, the central government continues to sponsor teacher skills improvement programs to enhance effective teaching and learning delivery. For example, as part of efforts to achieve quality Basic Education, 12,000 pupil teachers were enrolled under the Untrained Teacher Diploma in Basic Education (UTDB) Program in the year 2013. In addition, In-Service Education and Training was organized for 3,086 KG teachers, 13,264 Primary School teachers and 6,534 JHS teachers in the same year (Government of Ghana, 2014).

These do not however overshadow other stakeholders such as parents, the community and philanthropists diverse roles at the local school level to enhance education delivery. These stakeholders provide various kinds of support such as provision of classroom blocks through communal labour, books, good drinking water and teaching /learning resources.

At the Secondary level, government continues to subsidize the cost of education in order to increase access to this level of education. In view of this, subsidy was provided for 736,919 Senior High School students and 55,147 TVET students in 2013 (GOG, 2014). To ensure adequate provision of infrastructure so as to increase access to SHS enrolment, the Government of Ghana through the Ministries of Finance and Education, completed seventy-five 6-unit classroom blocks while forty-five 2-storey emergency dormitory blocks were completed and handed over by the close of the 2012/2013 academic year (GOG, 2014). Again, other stakeholders contribute their quota to the success of the secondary level of education in Ghana through various means. Their support comes in various forms such as provision of counterpart fees by parents, infrastructural

facilities such as dormitory and classroom blocks, renovation of existing buildings, school buses, and furniture and office equipment such as computers.

The tertiary level of education in Ghana is mainly financed through the cost sharing method. Thus, the cost is shared between the government and the parents of the beneficiary student. The major source of funding tertiary education is through government subvention which provides about 50% of institutions' budget requirement (UNESCO, 2006). Tuition is free at all levels of education. Parents however, have been paying Academic Facility User Fees (AFUF) introduced in Universities and Polytechnic since the 1999/2000 academic year as part of the cost sharing process. It is important to stress that government provides 30% rebate on the AFUF and parents bear the 70 % (UNESCO, 2006)

One of the success stories in educational financing in Ghana has been the introduction of the Ghana Education Trust fund (GET fund). This fund was established by an Act of parliament- The Ghana Education Trust Fund Act 2000 (Act 581). The objective of the fund is to provide finance to supplement the provision of the education at all levels by Government (Government of Ghana, 2000). The GET fund is generated from 20 percent of all VAT receipts. This is then used to supplement financing shortfalls at both tertiary and pre-tertiary levels of education. For the polytechnics, the GET fund helped to increase funding from 28 percent of assessed requirements in 1998 to 58 percent in 2000 (Effah 2003). The GET Fund has come to assist in infrastructure developments in education and a student loan scheme has been instituted through this fund. GET fund support has been used to expand academic and physical facilities (i.e. student hostels, lecture halls, laboratories etc) allowing institutions to increase their intake (Akyeampong, 2010)

A student loan scheme was introduced in Ghana in January 1988, proceeding to the introduction of cost sharing through the Social Security and National Insurance Trust (SSNIT). This fund is accessible to private tertiary students as well ( Chambas, 2003). Interests on loans taken by beneficiaries were highly subsidized by government. The major reason for the student loan was to support the student's private resources, especially transportation costs, boarding, feeding, and other expenses that were difficult for many families because of the high poverty rate in the country. This was replaced with the Student Loan Trust Fund (SLTF) as an off-shoot of the Ghana Education Trust Fund in the spring of 2005 through legislation. This was mainly due to the inability of the SSNIT to retrieve loans granted to beneficiary students. With the establishment of the new entity, the volume of student loans was increased by ₵1 million to ₵3.5 million.

The various universities also engage in various income generation ventures to finance some of their expenditures. These include execution of projects for local and multinational companies, distance education programs, sandwich courses and rental of university properties such as halls and conference facilities. Some also invest in various financial security instruments to generate interest.

## **Kenya**

Financing of education in Kenya has been carried out through partnerships between and among government, private investors, donors, local communities and religious groups. According to the Economic Survey of Kenya, the social sector takes the highest portion of recurrent government spending. In order to meet the development needs in education several players are involved, each contributing to a particular area. The UNICEF, UNESCO, African Development Bank (ADB), World Bank, World Food program (WFP), Department for International Development (DFID) and DANIDA are involved in various areas of financing education in Kenya. UNICEF funds FPE, preschool education, girl child and education of children in difficult circumstances, participation and retention at primary school level. UNESCO deals with expansion of secondary and vocational education, improving school effectiveness, monitoring of achievement at primary and secondary levels and training of academic staff at higher institutions. ADB provides and supports development of equipments, and rehabilitates teacher education and technical colleges' facilities. WFP is involved in feeding programs in ASAL regions and urban slums. This program has resulted in increased access and retention in primary school education. DFID of the British government and DANIDA are involved in establishing physical facilities in primary and secondary schools, and technical and higher learning institutions. They also finance development of human resource and provision of equipments. (Republic of Kenya, 2012)

## **Rwanda**

Rwanda is committed to become gradually an economically self-reliant nation (Ministry of Education, 2006). This is in response to the past negative experiences such as delays of implementation of certain national programs due to the suspension or delays in the release of external donations. Hence, the nation opted to set up internal funding alternatives. In this respect, through community work known as "umuganda" organized formally once a month, citizens participate manually in school construction and even raise funds for emerging educational and any other societal need. Such practices are reported to have improved educational access, quality, retention and output. As a matter of fact, in 2004 Rwanda acknowledged the highest primary school net enrolment ratios (92%) in the entire sub-region (Ministry of Education, 2006).

Rwanda has developed a sector wide approach to education (SWAP), and came up with strategies to complement the few external financial assistance. One of these strategies is the approved ten years' financing strategy that would enable the nation to monitor the achievement of the Education for All targets by using Fast Track Initiative mechanisms (Ministry of Education, 2006). Further strategies in place include the efficient use of financial resources and using need assessment baselines. Starting by higher education, apart from the excellence sponsorship, the public financial assistance for the candidates for higher education in the country is now based not only on merit rather on the socio-economic status "ubudehe categories" for instance those from poor families, survivors of 1994 Tutsi Genocide, orphans, historically neglected groups are entitled to get assistance both in terms of tuition fees and living allowance while those from wealth background may only benefit determined proportions of tuitions fees ranging from 100%, 50% to 0%; thus their families catering for all their needs in terms of living expenses. Indeed, the same policy has fixed the maxima costs for higher education in Rwanda both in public and private institution by field of study (Minisiteri y'Ubuguzi, 2013).

Some of the fruits expected from this policy adopted by the Rwanda cabinet meeting held on 22<sup>nd</sup> February 2013 include the assistance of those who are really in need and substantial increase in number of prospective candidates for higher education. In addition to that, the policy shows up the guidelines of study loans management and reimbursement mechanisms after studies so that the money collected back benefit forthcoming generations (Minisiteri y'Ubuguzi, 2013). In the case of primary education, the government has taken up specialization of teachers, cutback of core courses and double shifting i.e. having two groups of learners one in the morning and another one in the afternoon as approaches to cut the costs, increase access, maximize the utilization of physical resources and rationalization of students-teacher ratios (Republic of Rwanda, 2008c).

Despite the above strategies, the government recognizes that effervescent private sector, high pledge of development partners and other stakeholders remain key players in the fulfillment of educational targets associated to skills development, national economic ability, and job opportunities (Republic of Rwanda, 2013b).

### **Identified gaps and challenges in formal education provision**

#### **Ghana**

Formal education in Ghana has chalked some success since independence. In spite of these achievements however, the education system of Ghana has had its fair share of challenges. In the basic education sector issues such as the low quality in terms of poor pupil learning achievement; lack of resources for teaching and learning, inadequate supply of trained and qualified teachers, resulting in extremes of class size and low enrolment of girls are some of the problems the sector is confronted with (Aheto-Tsegah, 2011). For instance, rural areas continue to be at a disadvantage as far as the distribution of teachers is concerned. The situation is even worse with respect to the placement of trained professional teachers. There is still very low percentage of trained teachers at the basic level. Only 31 per cent of teachers in the early childhood education sector (kindergartens) are trained. Primary level has about 51 per cent of teachers trained, with the junior high school level having about 66 per cent of teachers trained (Aheto-Tsegah, 2011). The delay in the release of capitation grant for the basic schools is one major issue of concern to the education sector of late. According to Andoh (2014), the Conference of Heads of Basic Schools (COHBS) expressed concern about the delay in the release of capitation grant to schools for the 2013/2014 academic year. The COHBS indicated that the delay was affecting the quality of education negatively.

At the Secondary Education level, one of the major challenges is that dropout is still high (MOESS, 2007). The report of the presidential commission on education reforms in Ghana which assessed the reasons why most Junior High School students were unable to access senior secondary attributed this phenomenon to a number of factors. These include: inadequate facilities and infrastructure, parent's inability to afford secondary fees, a lack of alternative tracks for students with different interests and abilities, an inability of students to meet the minimum requirements for further education and a lack of interest in further education (GOG, 2002). Another problem is the teacher shortages in the technical/vocational subject areas. This has effectively reduced quality of provision and undermined student interest in these specialized areas (Akyeampong 2005). The delay in the release of government subventions to off-set the subsidized component of the cost of education at this level is another setback to the provision of education at this level.

Challenges faced in the tertiary education sector vary from institution to institution. Some of the issues however cut across. One such issue is the inadequacy of funding for the tertiary sector. According to the Government of Ghana (2012), spending on tertiary education continues to decline from 21.7% in 2008 to 17.9% in 2011. This has made it more difficult for the various institutions under this sector to meet their set institutional targets. Coupled with this is the late release of funds for the sector. Another challenge that this sector faces is ensuring that there is wider participation from all groups, and not from well-off segments of society (Akyeampong, 2010). Available records show that much of the increased participation in tertiary education is coming from comparatively few secondary schools in the urban areas of the country.

## **Kenya**

Formal education cannot be possible if there were no funds to promote it. The funds are got from individual parents when they pay school fees, from the government, and from sponsors. The funds primarily are needed for books, infrastructure development and payment of teachers' salaries. Several problems hamper efficient provision of education in Kenya most of which are related to funding. There is lack of adequate infrastructure and shortage of permanent classrooms in primary schools, particularly in marginalized counties for example in North Eastern parts of the country. This causes inequalities in outcomes in national examinations (Muliru, 2014).

Lack of reliable data on children with special needs, out-of-school children and illiterate adults and youth are also challenging cases. This is due to inadequate machines and personnel in collecting, analyzing and recording correct data. There is also shortfall of adult literacy teachers as well as teaching and learning materials. There are no proper motivation and clear follow up on adult education which discourages education in this level. Indeed, the Kenyan education system suffers from low transition rates from primary to secondary, secondary to higher education institutions, and higher education to special fields or job market.

Vocational education and technical training suffers also from inadequate physical facilities as well as mechanisms for quality assurance of this sector. Limitation of resources for expansion of universities to cope with the large number of students leaving secondary schools, limits the number of students who access university education. This results in the raising of entry grades pushing many to seek private university education which are out of reach of the majority of poor students (Muricho & Chang'ch, 2013; softkenya.com 2014 & Republic of Kenya, 2012). Indeed, the mismatch between skills offered by universities and the demands of the labour market generates floods of graduates who cannot be absorbed into the labour market. This hampers the realization of Vision 2030 whose focus is to make Kenya a knowledge-based, middle income economy.

Kenyan education also acknowledges high pupils to teacher ratios in densely populated areas and low pupil to teacher ratios in less populated regions. This is in connection to the need to contain the wage bill of manageable levels whereby the government does not employ new teachers, but only replaces those who leave through death, resignation or retirement. This has led to shortfall of teachers in schools, overcrowded classrooms and poor quality education in public schools. In the end, there is shortage of places in secondary schools to absorb primary education graduates, who in turn are forced to join the swelling ranks of the unskilled and unemployed youth. (Kenya Initiatives wordpress.com 2014; Soft Kenya, 2014).

## **Rwanda**

Using levels of education, the gaps, challenges, envisaged and ongoing counteract mechanisms observed in Rwandan education system are hereby explained. First, starting by the early childhood education, the analysis of this level of education has highlighted limited access, poor quality of catering, weak partnership, collaboration and coordination, increased involvement and ownership among key stakeholders, inadequate facilities and teaching-learning aids, lack of enough teachers - academically trained for that level of education as major threats to this level of education (Republic of Rwanda (2011).

Secondly, at 12YBE combining primary, lower and higher secondary schools, classes in different locations are reported to be overcrowded. This impedes on the quality of school graduates, effectiveness of the learning process and the teachers' decrease in retention and motivation due to heavy load which is not correlated with the remuneration (Ministry of Education, 2006). Other challenges noted in this level of education include the low completion, unsatisfactory performance in national examinations, low transition rate to secondary education level, limited teaching-learning aids resources and poor school facilities and finally inadequate staff training in special needs education to cater for various learners' disabilities (Republic of Rwanda, 2008a).

Finally, in Technical and Vocational Education and Training-TVET, the attainments of the mission of this level of education is counteracted by curriculum, teaching methods, poor and inadequate instructional materials, lack of competent, qualified and trained teachers, limited level of public and private partnership and conflicting perception of TVET and general education at labor market (Republic of Rwanda, 2008d). For the sake of higher education, the educational system is yet to acquire enough and highly qualified teaching staff. Hence, some of the mechanisms in place include opening up postgraduate programs in Rwanda so as to reduce the burden to educate nationals abroad. Higher learning institutions are therefore, eagerly committed to train nationals to cut the huge cost incurred by expatriates (Republic of Rwanda, 2008b).

## **IV. Conclusion And Recommendations**

The overall findings of this study led to the realization that the governments of Ghana, Kenya and Rwanda are very much committed to build their educational systems as one of the key areas for their long term and sustainable socio-economic development. This is clearly observed right from the educational policies and goals in place. In fact, these countries have been attempted to reshape their educational systems so that it can

produce human resources equipped with adequate skills, knowledge and abilities; based on which poverty alleviation, welfare, employment and socio-economic progress can be assured. However, early childhood and TVET need more sounding voice and enforcement as formal levels of education.

As far as educational funding is concerned, there are differences between the three country attributed to the national priorities, economy, population and country side. Indeed, there are slight differences in duration and aims of different levels of education. Despite these, the similarity is that primary education is the level of education that gets heavier enrollments and more government support. This is justified by the increase in budget allocation year after year; which might be associated to the national and international tendency to make that level of education basic, free and compulsory. The analysis shows that specifically in Ghana, the government remains with beyond 90% of the educational sector expenses (Republic of Ghana, 2013 & Government of Ghana, 2010). This is an inspiring model however; the sustainability of the governments' continued investment may not be assured since the rate of funds to higher education is decreasing. Therefore there is need for alternative institutes to finance some of their expenditures.

Despite the educational achievement, these three African nations still acknowledge the fact that there exist multifarious and intertwined factors of socio-economic and cultural nature. These challenges that translate to insufficient funding, inadequate and unequal distribution of resources to the disadvantage of rural areas, teacher shortage and qualification, bureaucracy, increasing number of graduates which higher levels of education hardly accommodate, poor ICT penetration especially in primary schools and lack of curricula orientation to the labor market, which all together seem to be contributing to the deterioration of dreamt visions in the education sector (Orazem, 2012).

From the foregoing, it is recommended that:

1. Since it has been noted that there is decreasing government funding to higher education and the increasing limited chances of access to this level of education especially to poor students, it is recommended that this trend should be reversed so as not to carry the wrong message that this level of education has been turned into a private good. In relation to this, this study suggests that Ghana, Kenya and Rwanda governments maintain strong partnership with private sectors, largest community, local and international potential stakeholders to maximize higher educational opportunities .
2. Secondly, it was evident that diverse differences existed in the three countries as a result of diverse socio-economic and cultural practices .In order to address these issues of educational provisions and socio-economical development, it is recommended that strategies should be put in place to moderate the increasing births rates as well as appropriate change of negative attitude towards education amongst some communities, and eradicate political interference which might be some of hidden factors to under achievements of educational goals not only in the studied African countries, but all other African countries experiencing similar educational challenges.
3. Finally, the long lasting funding models that pose challenge to educational development as per these countries are in three fold. To overcome this challenge, a three pronged approach is recommended. The first is to use alumni, parents and philanthropists as in the case in Ghana whereby these educational partners now cover 70% of the Academic Facility User Fees; which is a demonstration of the responsibility of social investment. The second is the Kenyan approach to attract potential international agencies to enable the country to set up strong baselines resources on the basis of which gradually the country move on its own. The third one the fixed cost sharing between families and the government as practiced in Rwanda.

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