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Abstract
This paper is a discussion of the relationship between women education and sustainable economic development in Kenya and its implications for curriculum development and implementation processes. The argument advanced in this paper is that the solution to the development problems in Kenya and other developing nations lies on women education. Indeed, women education is one of the initiatives that can propel Kenya in the achievement of Millennium Development Goals. In addition, women education can facilitate the achievement of Kenya Vision 2030 which aims at making Kenya a newly industrializing, middle income country providing high quality life for all its citizens by the year 2030. The paper provides recommendations on the way forward for women education in Kenya as well as the implications for curriculum development and implementation processes.

Keywords: Women education, development, curriculum, implementation, Millennium Development Goals

1. Introduction
Education is considered as the critical software for development as it shapes the destiny for every society (Mwaka, Nabwire & Musamas, 2014). Women education is an educational initiative that has been embraced by many countries in the world, Kenya included. Currently the initiative is driven by the Millennium Development Goals (MDG) and the goals of Education For All (EFA). The MDG’s with direct reference to women education are Goal 2: Achieve universal primary education and Goal 3: Promote gender equality and empower women. On the other hand, the goals for Education For All that are directly centred on women education are: Goal 2: Provide free and compulsory primary education for all and Goal 5: Achieve gender parity by 2005 and gender equality by 2015 (UNESCO, 2003). This means that everybody in the society should be given a chance to attend school, women included. This paper is a discussion of the relationship between women education and sustainable economic development in Kenya and its implications for curriculum development and implementation processes. The argument advanced in this paper is that the solution to the development problems in Kenya and other developing nations lies on women education. Indeed, women education is one of the initiatives to propel Kenya in the achievement of Millennium Development Goals. In addition, women education can facilitate the achievement of Kenya Vision 2030 which aims at making Kenya a newly industrializing, middle income country, providing high quality life for all its citizens by the year 2030. The paper provides recommendations on the way forward for women education in Kenya as well as the implications for curriculum development and implementation processes.

2. The current state of women education in Kenya
Education is a tool for national development. It is also a fundamental human right: Every child is entitled to it. It is critical to our development as individuals and as societies, and it helps pave the way to a successful and productive future. When we ensure that children have access to a rights-based, quality education that is rooted in gender equality, we create a ripple effect of opportunity that impacts generations to come. We should consider the wise statement by a visionary Ghanian educator that:

The surest way to keep a people down is to educate men and neglect the women. If you educate a man you simply educate an individual, but if you educate a woman, you educate a family (Kwegyir, J. E Aggrey, 1875-1927 quoted in Tembon & Fort, 2008).

These sentiments are shared by Wamahiu (2011) who when giving a talk on “Educate more girls today for better Kenya” said, “You educate a girl you educate a nation”. There’s adequate evidence that educating women is beneficial at the national, community, family and individual levels (MOE, 2007).

Universal education, in addition to being an important Millennium Development Goal, is the foundation for national development itself. The education of women is an especially effective tool for national development, since developing countries cannot afford to ignore the skills and talents of half of their citizenry (Tembon & Fort, 2008). In fact women education is one of the most valuable investments that a country can undertake. This is because women account for more than half of the world’s population. The UWEZO (2010) learning assessment that was conducted in Kenya in 70 districts confirms that children’s literacy and numeracy
competencies increase with the increase in mothers’ level of formal schooling (Wamahiu, 2011). We find that although women perform two-thirds of the hours worked, they receive one-tenth of the world's income, and have less than one hundredth of the world's property registered in their names (WERK, 2011). The constitution of Kenya also prohibits discrimination between different social groups. Chege & Sifuna, 2006:135 argue:

Basic education has been key to the advancement of economic activities for many groups of women in the country since the 1970’s. Local women with relatively higher education have assumed positions of leadership to guide their colleagues up the political as well as the economic ladder.

We find that despite the efforts and the progress in the promotion of women education in Kenya, the gap between boys and girls is still too large in education (Odhiambo, 2012). With the implementation of Free Primary Education (FPE) in Kenya, primary school education enrolment rates have increased tremendously in the recent past. High primary completion rates have also been observed. In fact the ratio of girls to boys enrolled in school has risen at all levels since 1990. According to the World Bank Fact Sheet on Girl Child education (2007) the enrolment of girls attending secondary school rose from 881,328 in 2003 to 1180267 in 2007. However, despite the significant progress in reducing gender gap in school enrolment, substantial discrepancies remain. Of importance is that the increase in enrolment in 2007 was by 298,939 students and out of these 117673 were female students. The Kenya Certificate of Secondary Education (KCSE) results of the year 2011 reflect these discrepancies in that out of the top 100 students nationally, only 34 were female students. In addition, out of the top 10 schools, only 3 were girls’ schools. Out of the 10 top candidates, only 3 were females with the first female candidate ranking fourth nationally. The KCSE results of the year 2013 and 2014 also reflected discrepancies as well. In the KCSE results of the year 2013, out of the top 10 schools, only three were girls’ schools and the first girls’ school was position three (http://www.standardmedia.co.ke). Again out of the top fifteen schools in the KCSE results of the year 2014, only three were girls schools with the first school ranked the 6th position (Daily Nation, 5th March 2015).

MoE (2007) observe that despite the introduction of Free Primary Education (FPE) in Kenya and other interventions, gender disparities are observed in performance, access, retention, transition, and achievement at all levels of education. According to Wamahiu (2011) in Kenya out of every 100 girls, 76 complete their primary education as compared to 87 boys. This means that though children of both genders drop out, girls are more disadvantaged.

The poor transitions translate to gender imbalances at higher educational institutions. This is a poor trend given that education is a primary determinant of social mobility. With the gender disparities in education, it makes women ill prepared to compete equally with their male counterparts for jobs that require formal education or high level technological skills and professionalism (Chege & Sifuna, 2006). According to World Bank Fact sheet (2007) more than 20% of low- and middle-income countries are off-track or seriously off-track from meeting the MDG of empowering women and girls by achieving gender parity in education. Similarly, almost 30% of low and middle income countries are off track or seriously off track from meeting the MDG of universal primary education. The discussions advanced in this section confirm that indeed Kenya if lagging behind just like other developing countries in the achievement of MDG’s especially those touching on women education. This is despite the strategies that have currently been put in place in Kenya to address gender inequalities in education like provision of school boarding facilities in ASAL areas, affirmative action in admission in public universities, bursary allocations, provisions of resources for science laboratories in girls’ schools, community sensitization and mobilization, continuous curriculum reviews, improvement in pedagogy and formulation of policy guidelines as stipulated in MoE (2007:vi).
3. Women education and economic development in Kenya

Education for women can be said to be the solution to the development problems in developing countries like Kenya. The provision of women education can steer Kenya forward in the achievement of the MDG’s and the Kenya Vision 2030 in one way or another. The World Bank has recognized that there is no investment more effective for achieving development goals than educating girls. In fact educating women is one of the most cost effective ways of spurring development (Tembon & Fort, 2008). This paper holds that women education in Kenya can steer the country in the achievement of many of the eight MDG’s. Let us now see how this is possible.

3.1 Women education and poverty reduction

The eradication of extreme poverty and hunger is the focus of the 1st MDG. Women’s education is important for poverty reduction not only because of the income it generates but also because it helps break the vicious cycle of poverty (Tembon & Fort, 2008). Whether self-employed or earning wages, working women help their households escape poverty. Their returns flow not only to themselves but to other generations as well. In addition, educated women are more likely to send their children to school (Tembon & Fort, 2008). Women education promotes per capital income growth. Dollar and Gatti (1999) report the findings of a study that indicated that increasing the share of women with secondary education by 1 percent boosts annual per capital income growth by 0.3 percent on average.

This argument is supported by MoE (2007) who state that with even a basic education, individual women effectively engage in economic activities and thus contribute to greater national productivity. Women education has intergenerational benefits as well. Filmer (2000) reports that each additional year of formal education completed by a mother translates into her children remaining in school for an additional one-third to one half year. Women education is thus beneficial to oncoming generations as well.

3.2 Women education and empowerment

Women empowerment which is the focus of the 3rd MDG can partly be achieved through women education. This is because more education reduces the rate of violence against women, enables them to leave abusive relationships and encourages them to reject adverse cultural practices like Female Genital Mutilation (Tembon & Forst, 2008).

In favour of this, Sen (1999) postulates that educated women are likely to participate more in house hold decisions and to stand for themselves thus reducing their vulnerability to domestic violence. El-Gabaly (2006) reports a study that revealed that in Egypt, women with secondary education are four times more likely to oppose the practice of Female Genital Mutilation.

3.3 Women education and improvement of infant and maternal mortality

The 4th and 5th MDG emphasize on reducing child mortality and improving maternal health. Women education can in addition propel the achievement of these goals in Kenya. We find that most educated women have the awareness of post natal care and the advantages of breast feeding their children. Most of them also are able to feed the infants on balanced diet. Schultz (1993) reports a study that revealed that an additional year of female schooling reduces the probability of child mortality by 5 to 10 percentage points. In another study by UNICEF (2003) it was found out that an additional year of schooling for 1000 women helps prevent two maternal deaths. According to MoE (2007) educated women bring up healthier and better educated children and families and reduce infant and maternal mortality rates.

3.4 Women education and improvement of family health

The 6th MDG on combating HIV/AIDS, malaria and other diseases is inclined towards family health. Women education on the other hand is an effective tool for this. The education of girls is the most cost effective way of improving the health and well-being of the family in developing countries like Kenya (the education of the fathers may not have the same measure of effect). Educated women have the knowledge and skills on the proper diet for their families. They attend prenatal care thereby improving their health and wellbeing when expectant. This is partly because of the fact that majority of them have a source of income and can pay for pre natal care services and hospital delivery services where required.

Education of women improves child health because of educated mothers’ greater knowledge of the importance of hygiene and of simple remedies (King & Hill, 1993). All this lowers infant mortality, which in turn means that a family does not need to have a large number of children in order to hedge against the possibility of premature death of some children. Further, it appears that education of women increases the age at marriage (or at cohabitation) and through this delay, lowers the total fertility rate, that is the number of children ever born to a woman (Geeta, 2002). Also, when women have greater control of resources in the family, they are more likely to allocate resources on food, children health care and education. Countries with higher levels of female secondary education enrolment have lower infant mortality rates, lower rates of HIV/AIDS and better.
child nutrition (Tembon & Forst, 2008).

Education can be said to be an AIDS vaccine. Recognizing that as schooling increases, HIV/AIDS infections decrease, some even speak of the “education vaccine” for AIDS. De Walque (2004) reports a study that found out that Ugandan women with secondary education were three times less likely to be HIV positive than those with no education.

Poor girls in rural areas, who are least likely to receive primary education, will be the most vulnerable to HIV/AIDS infection. This will have a major impact on future food security, as girls and women become unable to farm because of their own illness, or because of their need to care for other family members or HIV/AIDS orphans. This is because in most countries its women who are in the forefront in farming activities and in taking care of their families.

The educated woman is less vulnerable to HIV/AIDS infection and if already infected is able to live with it for a relatively long period of time compared to the uneducated one. The women can be used in family and community mobilization on HIV/AIDS awareness campaigns. This is because mothers spend more time with the children compared to the fathers.

Majority of educated women possess the knowledge and skills on prevention of malaria and other killer diseases. For example the use of mosquito nets, the need to keep the environment clean and safe from stagnant water and poor waste disposal. Majority of educated women are in the forefront in environmental conservation and management which is one of effective actions towards the prevention of malaria and other killer diseases

3.5 Girl child education and improvement of Agricultural productivity

Chege & Sifuna (2006) report that studies demonstrate a relationship between education and advancement in production process for both men and women. Primary education is linked to increases in farm productivity. This is because literate farmers tend to produce higher yields per acre because they have more access agricultural and cooperative training, seek more contact with agricultural extension workers and are better placed to implement new ideas and to use modern technology (Floro & Wolf, 1990). In Kenya, women education can lead to more improvements in agricultural productivity since women undertake most of the agricultural activities. For Kenya improvements in agricultural productivity can be a big step to eradication of poverty. Kenya is one of the poorest countries in the world with majority of its citizens earning less than one US dollar per day.

Since women are in the forefront in farming activities, education for girls increases their knowledge and skills on the best farming methods. Its women who mostly engage in farming activities as the men leave to get the daily bread for the families. This is especially in rural areas. The women are also enlightened on the best methods of preserving food and water to avoid wastage. This is a very welcome gesture for Kenya now that we are battling with food insecurities. The improvement of Agricultural productivity is the focus of MDG 1: Eradicate extreme poverty and hunger. Women education is vital in increasing female participation and productivity in the labour market especially in agricultural wage employment. This greater productivity means higher economic growth and more effective reduction of poverty (Tembon & Fort, 2008).

3.6 Women education and improvement in political decision making

Educating girls increases their chances of taking part in politics and leadership by improving their decision making attempts and contributions. This partly involves their interests and abilities to vote wisely, vie for parliamentary posts and other leadership posts in the country. Kenya cannot compete favourably with the countries in the world without women participation in political decision making and in leadership. Education improves the chances of a woman’s civic participation and improves the prospects for better governance and democracy in their countries (Barro, 1999).

3.7 Women education and population control

One of the major problems facing the developing countries like Kenya is population explosion. The answer to this problem is partly the provision of women education. Women education has powerful effects on the total fertility rates hence population growth, infant mortality rate, child health and nutrition ( Momsien, 1991). The opportunity cost of staying at home for child bearing and rearing increases as women become more educated and so educated women desire small families (Geeta, 2002). Education changes women preferences about the quantity verses quality of children. Educated women prefer few children but of better quality.

Research shows that women education leads to smaller and healthier families (Chege & Sifuna, 2006). Educated women tend to have fewer children than the uneducated ones. Herzee (1991) cited in Chege & Sifuna (2006) postulate that the relationship is stronger as women education increases. Secondary education and higher education bears greater impacts on the girls life chances compared to primary education. Educated women have knowledge and skills on birth control methods. They also remain in school until late thereby reducing their productive span. The fertility rate of a woman drops by almost one birth when she gains four additional years of production process for both men and women. Primary education is linked to increases in farm productivity. This is because literate farmers tend to produce higher yields per acre because they have more access agricultural and cooperative training, seek more contact with agricultural extension workers and are better placed to implement new ideas and to use modern technology (Floro & Wolf, 1990). In Kenya, women education can lead to more improvements in agricultural productivity since women undertake most of the agricultural activities. For Kenya improvements in agricultural productivity can be a big step to eradication of poverty. Kenya is one of the poorest countries in the world with majority of its citizens earning less than one US dollar per day.

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education (Klasen, 1999). This is partly because education increases women’s age at marriage hence lowering the fertility rate. The few children that the educated women get are however healthier and are likely to obtain education because the educated woman understands the essence of education for development of the individual and the society at large.

Women education compared to that of men correlates strongly with the increased desire to educate both male and female children (Chege & Sifuna, 2006). Behrman (1990) reports a study in which increased participation in education among children in Nicaragua, Brazil, Malaysia, the Philippines, and Peru correlated with their mother’s education. The same as reported in Botswana and Tanzania where female household heads encouraged their children to study. Maternal education has been found to be a main influence in girls’ education (Floro & Wolf, 1990; Lavy, 1992). Although paternal education influences girl child’s education, maternal education is a stronger influence (Chege & Sifuna, 2006; Geeta, 2002).

3.8 Women education and their participation in the labour market
Women education increases their labour force participation as well as in their earnings. Educated women's greater participation in labour market work and their higher earnings are good for their status as well as their children because a greater proportion of women's income than men's is spent on child’s welfare. Educated women enter the labour market and earn income through engaging in productive economic activities (MoE, 2007). Psacharopoulos and Patrinos (2002) report the findings of a study that revealed that providing an extra year of schooling for girls beyond the average boosts eventual wages by 1,020 percent.

Mother’s education has a greater impact on the educational attainment and school achievement of children than father's education. This is plausible given the greater interaction between mother and children in most families since, in most countries, fathers are usually the main earners in the household. In this way, education of females contributes more significantly (than the education of males) to increases in human capital, productivity, and economic growth not only in their own generation but also in the next generations.

World bank (2007) postulate that the systematic exclusion of women from access to schooling and the labour force translates into a less educated workforce, inefficient allocation of labour, lost productivity, and consequently diminished progress of economic development. Evidence across countries suggests that countries with better gender equality are more likely to have higher economic growth.

The benefits of women’s education go beyond higher productivity for 50 percent of the population. More educated women also tend to be healthier, participate more in the formal labour market, earn more income, have fewer children, and provide better health care and education to their children, all of which eventually improve the well-being of all individuals and lift households out of poverty. These benefits also transmit across generations, as well as to their communities at large.

4. Implications for curriculum planning and implementation processes
Women education is a significant indicator of our country’s economic development. This paper recommends some effective actions in the curriculum development and implementation processes as the way forward for women education in Kenya as follows:

(i) Regular reviews of the school curriculum to reflect a gender sensitive educational system.
(ii) In Mixed schools and Girls’ schools we need more women teachers for Sciences, Mathematics and Technical subjects as role models.
(iii) Agricultural education should be intensified especially at primary level of schooling.
(iv) Universities to provide more courses and programmes on gender and education.
(v) Teachers and school administrators be provided with in-service education on the implementation on gender policy in education.
(vi) More bursaries, scholarships and affirmative actions on girl child education.
(vii) Provision of funds by the government, Non-Governmental organizations among others on research on women education in Kenya.
(viii) More girls’ schools should be established especially in the arid and semi-arid regions in Kenya.

5. Conclusion
Women education is the key to economic development in Kenya. This paper has shed light on the fact that more educated women tend to earn more income, raise healthier families, effectively participate in agricultural activities, participate in political decision making, control population growth and participate in the labour market. All this translates to women empowerment and eventually to improved sustainable economic development in our country, Kenya. This paper also highlights some effective actions for curriculum development and implementation processes which if adopted can effect desired changes in our education system in favour of women education in our country.
References


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