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iMLANGO Project: Equalizing Utilization of Information Among Rural Schools In Kenya Through Satellite Technology

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Abstract: Information and Communication Technology (ICT) is a principal driver of economic development and social change worldwide. Information Communication and Technologies empower people with the ability to communicate instantaneously, facilitate the development process by increasing efficiency, effectiveness and equity- it has helped increase literacy rates all over the world. ICT plays vital roles in the provision of information to school population and thus, it has become an important aspect of the learning process. It has impacted on every sphere of school library activity thus presenting an opportunity to provide value-added information services, access to a wide variety of digital based information resources, empowerment of teachers and learners, making significant contributions to learning and achievement. The increase in ICT in primary schools is crucial because teachers and learners are no longer inhibited by outdated resources. ICT connectivity allows school populations to acquire the skills required for the information society, improves administrative processes and supports teacher training. With the rapid development of networked resources and access tools available over the Internet, information becomes easily accessible both in rural, marginalised rural areas, and in metropolis. However, access to ICT applications and services and systematic knowledge-sharing in marginalized and rural areas is either non-existent or very limited. This paper examines the role of *iMlango* project (A strategic partnership with the UK Department for International Development(DFID) and corporate partners Avanti, sQuid and Whizz Education)in equalizing opportunities for children in rural and marginalised areas of Kenya to interact with technology and access E-resources. The paper discusses implementation of the project, empowerment of the school population with digital literacy, the kind of challenges the project is faces and how it is overcoming the challenges for successful implementation. The paper argues that *iMlango* Project has come at the right time especially now that E-resources are increasingly important to all aspects of education; from teaching and learning, through to the collection of learner's data. Children in rural and marginalized areas of Kenya will gain access to new e-learning opportunities.
Keywords: Education, E-resources, *iMlango*, Information and Communication Technology, Marginalized communities, School children

INTRODUCTION

Information and Communication Technology (ICT) is a key driver of economic development and social change globally. Its integration in education however is considerably more recent, small-scale and experimental in most of the developing countries including Kenya. However, the adoption of computers in education has progressed, from acquisition of computer skills, computer aided teaching, communications and research, to usage in every subject. This has been accelerated by convergence of the computer and telecommunication technologies, particularly e-mail and Internet[1].

The vision of the Government of Kenya is to facilitate Information and Communication Technology as a tool for education and training. Kenya's Vision 2030 emphasizes the role of schools, technical colleges and universities in providing ICT training to meet future skills needs, and the need to improve knowledge of mathematics and science. In order to achieve this vision, every educational institution, teacher, learner and the respective community should be equipped with appropriate Information and Communication Technology infrastructure, competencies and policies for usage and progress. The vision recognizes the fact that ICT provides capabilities and skills needed for a knowledge-based economy. It also emphasizes the transformation of teaching and learning to incorporate new pedagogies that are appropriate for the 21st century [2].

One of the key objectives of the Government of Kenya's education policy is to promote information and communications technology as a tool for learning. The primary and secondary schools curricula provide

diversified technology and computer studies options. However, access to ICT applications and services and systematic knowledge-sharing in marginalized communities and rural areas is either non-existent or very limited. Access remains out of reach in the vast majority of rural and disadvantaged communities. Moreover, the integration and application of Information and Communication Technology within the learning process in the education sector in Kenya is still in its infancy [3].

Information and communication technology is a powerful tool for promoting both knowledge and communication dimensions of development and its potential could be harnessed for the reduction of poverty. Empowerment makes governments work better with its people especially the poor and it eradicates social barriers. It is the responsibility of the teachers and information professionals to ensure that pupils are taught how to access and use various information sources.ICT provides access to and use of broad range of powerful tools to enhance both the knowledge and communication for development. These technologies can be used to reach marginalized groups. It can be useful in providing better possibilities to empower individuals to become active participants in their societies. The government and other stakeholders should make efforts to enable marginalized communities benefit from ICTs through creating awareness about the benefits and opportunities offered by ICTs. In addition, the government should enhance capacity building in ICT use as well as setting up projects or initiatives aimed at increasing marginalized access and use of ICTs [4].

The constitution of Kenya 2010 defines marginalised communities as communities in underserved areas, both urban and rural, that include the following target groups, among others: women, persons with disabilities, unemployed, poor, youth, elderly and immigrants. Additionally, a marginalised group is defined in the same clause as a group of people who, because of laws or practices before, on, or after the effective date, were or are disadvantaged by discrimination on one or more of the grounds in Article 27 (4)[5]. Marginalized and the poor in disadvantaged communities do not fully have knowledge on how to access and use ICTs to empower and promote themselves. Further access to ICT applications and services and systematic knowledge-sharing in marginalized communities and rural areas is either non-existent or very limited. Similarly, access remains out of reach for the majority of rural and marginalised communities, in particular for women and people with disabilities. The challenges faced in rural areas include: low literacy rates, lack of information, weak knowledge base, the lack of understanding and awareness on the importance of ICT in development, weak partnerships and capacity building, lack of mechanisms that would enable disadvantaged communities to generate and share information with other communities for national and international development, distant and poor roads that make technology roll-out difficult, cost of computers, school internet connectivity that are non-existent or unreliable, lack of electricity in many schools yet, high maintenance and other costs. Moreover, most teachers themselves lack technology skills [6].

A report by the National Council for Science and Technology (2010) indicated that computer use in Kenyan classrooms is still in its early phases and that technology roll-out to Kenyan educational system seems to lag behind. The report concluded that the perceptions and experiences of teachers and administrators do play an important role in the use of computers in Kenyan schools [7].

The Kenyan government has a role to play in the implementation of strategies which include integrating Information Communication Technology into primary education, reforming school curricula, updating teacher training, and strengthening partnerships with other stake holders in education sector. In addition, the government has goals to equip pupils and teachers with information literacy skills.

THE *iMLANGO* PROJECT

The term *iMlango* is derived from English and Swahili words, ‘‘i’’ for ‘‘Internet’’ and ‘’Mlango’’ for “door” or ‘‘portal’’. Thus, it means 'the internet at your door'. The project is an e-learning programme developed for African schools, with the Programme for Kenya, having been launched in its first piloting phase in January 2015. The programme rolled out in four counties namely Kilifi, Kajiado, Makueni and Uasin Gishu. The project is supported by the Kenyan Ministry of Education and it is the result of strategic partnership between UK, Department for International Development (DFID) and the *iMlango* consortium (Avanti which provides the satellite broadband,s Quid, which provides real time swipe card-driven attendance tracking, Camara Education, providing computer labs, and Whizz Education which provides an online maths tutor and partnerships between *iMlango* and the teachers, children and their parents). The Project is delivering improved education outcomes to 150,000 children - including 52,000 marginalised girls.In Kenya, the programme is co-ordinated by sQuid from its operation centre in Nairobi[8].

The projects uniqueness has captured the attention of children, teachers, governments and aid agencies. Moreover the project is credited for creating a digital education profile for children in rural areas of Kenya [9].

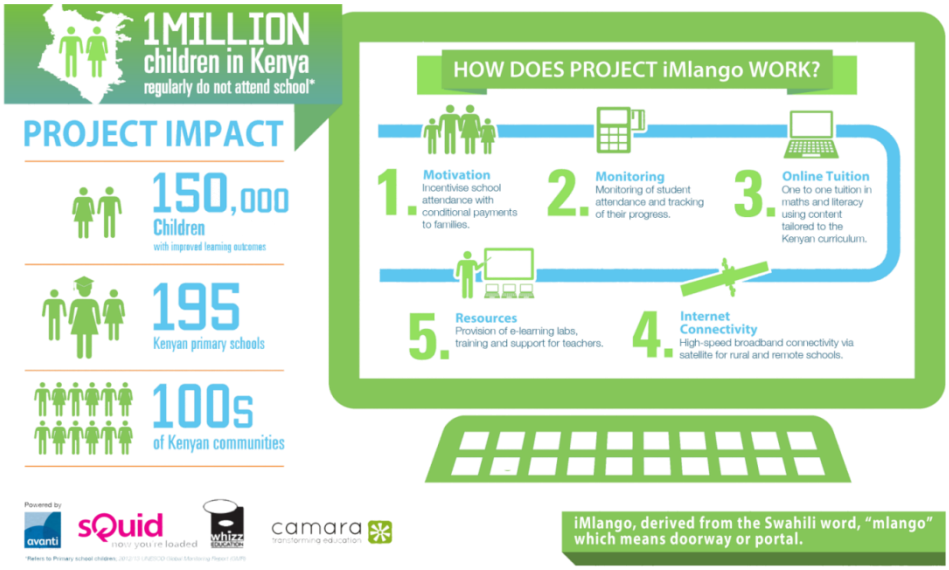
The project underpins its work on a UNESCO'S report which revealed that although gaps in education affect both boys and girls in Kenya, girls are the most affected [9].Thus, the project endeavours to provide access to better education - supporting teachers, pupils and communities, targeting girls previously marginalised from the system. Further, the project addresses the cultural and financial issues that can lead to reduced school attendance and drop outs through electronic attendance monitoring and conditional payments to families. The project recognizes that families play a critical role in girls accessing and remaining in education. At the heart of the *iMlango* project sits an internet learning platform, accessed via high-speed satellite broadband connectivity, where partners provide learners with interactive, individualised learning tools [10].

The project's theory of change is based on the following core principles:

- Connectivity – digital connectivity to target remote and rural schools and communities via installation of quality, high-speed satellite broadband from Avanti Communications.
- Content –through provision of an online maths tutor called Maths-Whizz, delivering maths lessons suited to each individual student's unique profile and pace of learning; live online reports tracking students usage and progression; and a library of 'whole class teaching' literacy and e-learning content, supplied by Whizz Education and accessed through sQuid's Smart account for individual profiling.
- Motivation – provision of small financial incentives to poor families to encourage them allow girls to attend school.
- Capacity – creation of secure learning facilities at each target school, installed by Camara Education with PCs networked to the internet. This is combined with online tutorials, training for teachers and technical support to develop their capacity to use these facilities in teaching[11].

***iMLANGO* INFOGRAPHIC**

The infographic below demonstrates and visualizes the role of *iMlango* Project in improving learning in the participating schools in marginalised areas [12].



The project report asserts that, over one million children in Kenya do not regularly attend school due to marginalisation by societal issues including poverty and distance and thus the project came up with a solution that could provide improved learning and life outcomes for school children in marginalised communities. The project impacts on 150,000 pupils– of which 50,000 are marginalised girls in 195 remote and rural schools across Kenya. By March 2015, all the targeted 195 primary schools had been equipped with eLearning centres. Combining a fully integrated e-learning platform with robust measurement; the project demonstrates the opportunities of broadband enablement by satellite to rural schools.

The project offers: motivation through provision of financial incentives to parents to encourage them allow children especially girls to attend school, thus improving on non-attendance and drop-out rates; monitoring of pupils attendance and tracking of their progress; online tuition and literacy using content tailored to the Kenyan curriculum; e- resources; e-learning labs; training and support for teachers; and

high-speed broadband connectivity via satellite for rural and remote schools.

E- RESOURCES

E-resources are increasingly important to all aspects of education from teaching and learning, through to the collection of learner data and administration. The availability of information via current telecommunication technologies could act as an equalizer that would allow rural population to access the online resources available to urban populations. Access to electronic networks can help address the notion of digital divide that is, toward a nation divided between information "haves" and "have-nots"-with attendant disparities in education, income potential, and opportunities. Rural communities, like urban communities, require timely access and use of relevant diversified information in order to make decisions that affect their lives and in order to compete successfully in a global marketplace [13].

Internet allows more equal participation by those who are often excluded or discriminated against [14]. The Internet empowers learners by giving them more diversified choices of information resources as well as personal control over their pace of learning. Use of the Internet in rural schools will contribute to the acquisition of computer literacy by learners as well as prepare them for employment where computer technology is already in use. It provides additional benefits for schools in remote geographical areas where there is no easy access to libraries or other resources thus eliminating the digital divide in the long run.

ICT can transform the way education is delivered as well as making it easier for teachers to plan and find high quality materials. In addition, it helps develop skills necessary for accessing and using information in their everyday endeavours. Similarly, provision of internet to remote and rural schools via installation of high-speed satellite broadband aims to increase learner's connectivity [15]. Education is provided for in the United Nations Declaration of Human Rights Article 26 as a basic human right. Like all other human rights, it is universal and everyone, regardless of gender, religion, ethnicity or economic status, is entitled to it [16]. A right to education implies a right to access and use of information. Quality primary education provides a base for all other forms of advanced education and sustainable development [17].

Children are supposed to attain adequate and relevant information to enable them match up their interests and abilities with their aspirations. Information is therefore the key to success.Richard Marett, CEO of Whizz Education in one of his speeches commented that reliable Internet access is an integral part of an education program. It is for this reason that the *iMlango* project targets remote and rural schools and communities with installation of quality, high-speed satellite broadband [18].

A 1991 study commissioned by the U.S. Congress Office of Technology Assessment reports that, despite their diversity, many rural areas share declining income levels, high unemployment, and population loss and tends to be slow in adoption of innovations than more urban communities. Further, the report asserts that, rural communities have serious information needs that no one is meeting [19].

This paper recognizes *iMlango* project as a potential key point of access to remote information for marginalised residents and envisions the project as serving as an effective change agent in the rural community. Reliable access to broadband is crucial when delivering e-learning programmes. However, many schools in Kenya are located beyond the reach of terrestrial networks. However, *iMlango* uses satellite broadband connectivity which enables pupils to access the programme's dynamic E-learning platform at all times. Thus, the project serves as the doorway to a better education for it provides internet based resources to schools and communities to help improve the education experience and outcomes for children, and to help communities access the digital economy.

The project has provided learners with online Maths-Whizz (accessed on iPads and Android tablets), content in literacy and life skills, and online learning resources. In addition, the project has also provided Q-files, online encyclopaedia designed for children and a collection of stories specially created for African children and are available to pupils and teachers through the *iMlango* portal. Further, the project offers an interactive learning platform which includes a personalised web portal that enables teachers and students to build digital literacy and access exciting learning tools. The programme aims to bring the potential of digital learning and the digital economy to the communities around the schools too [20].

The Q-files have added engaging and dynamic learning content to the learning platform, as well as enabling learners to source information in an exploratory manner. Moreover, the online encyclopaedia has a variety of intriguing and important subjects such as: history, science, geography, culture and technology. The content is constantly updated by education professionals and includes pictures and videos that enhance the delivery of the content for students. In addition, the online African Story book stories provided by the programme enhances access to relevant information which is imperative to improving learning outcomes in particular, literacy. The stories can be accessed in either English or Swahili and are presented with beautiful illustrations.

The programmes interactive learning platform enables pupils to access e-resources that are tailored to the user's age, region or situation. The learning platform is linked to a database providing detailed analytics on the user and their educational progression, as well as time spent on a specific learning module. Sourced from education specialists globally, the content allows pupils to learn and acquire new skills, receive and understand relevant information, and continue their education. The unique feature of the learning platform is that the content can be quickly adapted and changed, depending on user feedback and, the learning experience can be constantly monitored, refined and improved to help them progress in whatever circumstance [21].

The project offers real educational progress, measured by real-time data which is generated from children's attendance and learning, s Quid's contactless smart card, Attendance App and NFC tablet, places a pupil at a place, and at a particular time. This forms their digital learning profile. Each teacher using the Maths-Whizz programme gets information every day on the pupils' progress in numeracy at an individual and class level. She/he can log in to see how individuals are managing and she can also see how her class as a whole is performing. She/he can even see which of the curriculum areas they are having most difficulty with, and is directed to whole class lessons at the correct level to address those areas. At an individual level the pupils go through topic sessions, Maths-Whizz assesses the progress to find if the pupil is struggling. Educational information can then be attached to each pupil's profile, as well as medical records and any other pertinent information [22].

ENHANCING DIGITAL LITERACY SKILLS AND INCLUSION IN RURAL CLASSROOMS

A child's journey towards literacy involves learning to speak, listen, read, understand, watch, draw and write[23].

Reading and writing are essential foundations of sound education, and thus basic requirements for all academic disciplines, including mathematics and science [24]. Reading and writing is often referred to as verbal literacy, and children begin developing this skill even before joining elementary school [25]. Verbal literacy remains paramount for success throughout life — from the beginnings of education to the future employment of adults [26]. Therefore, its attention in educational environments will continue to be a priority for administrators, policy–makers, parents and teachers.

Technology has also brought forth a new type of literacy referred to as digital literacy. This type of literacy refers to the ways people become comfortable using technology as they would any other natural language [27]. The use of educational technologies have a two–fold advantage: they can promote the types of literacy traditionally encouraged in learning, as well as the digital literacy essential for one to prosper in the digital age[28].

While technology is an everyday convenience for all, the integration of technology in primary schools in most countries of Africa is still in its infancy. The lack of digital skills in many countries in Africa is a major drawback to breaking the cycle of poverty, and this is something which *iMlango* project is dedicated to changing. Camara Education, one of the partners in *iMlango* project has educated and provided digital literacy skills to hundreds of thousands of children in disadvantaged communities around the world and these numbers continue to soar high with its implementation of more eLearning programmes. Further the project has provided digital literacy to teachers too. This is because it considers teachers as key enablers [29].

The technologies provided to schools require sensitisation, orientation and on-going instructional support. This would ensure that teachers are fully empowered to efficiently and effectively integrate *iMlango* project into their daily practices. Most teachers are now well equipped with the required ICT skills necessary in building their capacity to improve learning outcomes for the pupils. The teachers are also now in a better position to not only gain access to online learning resources through the *iMlango* portal, but also incorporate diversified resources from the portal for their teaching lessons. The project has combined online tutorials, training for teachers and technical support to develop their capacity to use ICT facilities in teaching. *iMlango* trainers and teachers are thus empowered with technology, knowledge and tools to make a difference. The teachers have the ability to facilitate individualised learning for each of their pupils through scheduling, monitoring and acting upon live accurate data to allow progress. Instruction of teachers is being provided by a select team of Kenyan "ICT Champion" Teachers, who have undergone a capacity development program developed and delivered by Camara Kenya. Ongoing instruction support is being provided by sQuid's team of dedicated Field Officers and Whizz Education's Kenyan Customer Success team[30].

In underscoring the significance of E-learning, John Fitzsimons, CEO with Camara Education has emphasized that technology is such a powerful tool that even a low budget tablet computer can contribute immensely to a child's learning experiences and rate of absorption in the classroom, much more so than relying on traditional teaching methods and materials[31].

THE *iMLANGO* PROGRAMMES OUTCOMES

UNESCO outlined a number of strategies to ensure all children receive quality education. However,

despite efforts by governments and donors to implement these measures, barriers persist, which has led to the development of various projects that use ICT to further improve access to quality education for girls from rural and marginalised areas [32]. In Kenya, as elsewhere in developing countries, persistent critical grassroots drawbacks still continue particularly in rural areas. These include teacher absenteeism, lack of quality teaching, and deficit of parent-teacher interaction and, more importantly, lack of access for marginalized rural communities (women, minorities, scheduled castes and tribes) at the elementary school stage. Interactive information and communication technologies were envisioned to be amongst other panaceas to overcome these drawbacks. Thus, there is a dire need at this stage for interactive learning inreal time to build children's skills sets [33].

The project is providing access to internet and delivering smart digital education services and resources which help to improve the education experience and outcomes for children.

*iMlango*is a real-time communication platform for students, as well as an access point for the digital world. The programmes outcomes include:-

- Improving learning outcomes: over the period 2015 and 2016 the projects aims at ensuring careful monitoring of Learning Outcomes and building new education support tools. With real-time data, the projects can provide fast feedback to education specialists and continuous improvement.
- Supporting teaching: *iMlango* builds resources for teachers, delivering support for the curriculum, generating new ideas, and encouraging sharing amongst the teaching community. The project has embarked on ToT's (Training of Trainers) who are used to impart knowledge and experience gained from the programme back to the teachers in their respective schools.
- Feedback and community empowering: *iMlango* aims to help communities gain access to the digital economy. In addition, the project aims at engaging the community in its activities and in provision of feedback. It considers the views of the teachers, parents and the pupils in gauging the impact of the programme. Some of the responses received from the parents were extremely positive; they couldn't be more grateful for the impact that it is having on their children, as the programme has helped motivate them to attend school every day. Some even stated that their children's school performance had dramatically improved since the inception of the *iMlango* program [34].

PERSONAL EXPERIENCES ON i*IMLANGO* PROJECT

iMlango project has left many teachers and learners highly motivated. For example, II visited a participating pilot school at Kilifi County (Maji Lango Mbaya primary school) in July 2015 while I was monitoring quarterly data collection for Women Education Research Kenya (WERK) research on Wasichana Wote Wasome (WWW) (Let All Girls Learn)Project and I got to spend some time with some of the teachers and pupils in class two and four. I noted that there was great excitement and enthusiasm among pupils and teachers and that the project seems to have great impact to the child, teacher and parent and pupils. Pupils have got a lot of digital exercises in mathematics and are exposed to the digital world where they learn a lot; teachers' works of taking roll calls have been eased - they are able also to research more information and content to deliver to the learners; teaching methods has been also improved - teachers are using projectors which are making learning interesting. Learning is becoming so real and motivating; learners donot miss classes because they are enjoying learning. The future of the pupils looks very bright. They do a lot of e - Learning. In addition, teachers are using projectors which are making learning interesting and motivating. All pupils were happy to be part of this programme. Parents are very happy to see their children using computers. For example, the deputy head teacher madam Maureen said that at times parents visit the school to see their kids working with computers. They said that the project had imparted digital literacy to the school population.

CHALLENGESIN IMPLEMENTATION OF THE *iMLANGO* ROJECT

iMlango has faced challenges in its implementation. These include:

- Cost of shipping and installing equipment: shipping and installation of equipment hasbeen too involving and time consuming. In addition the initial schools surveys in remote areas were also such a huge task and very expensive exercise. The team had to document which schools had access to electricity and which schools did not. Documenting this was a huge task in itself and involving.
- Lack of stable and reliable power supply**:** many schools are still not yet connected to electricity. Kenya being a developing country, the government has not been able to connect all parts of the country with electricity. Consequently, those schools that are located in areas not connected to the national grid, especially in rural areas are disadvantaged. Similarly, the other major constraint in the regular functioning of the *iMlango* project is lack of stable and

reliable electricity- there are frequent power cuts. Hence, there is need to strengthen the provision of, for example, solar powered batteries. At the same time, the government needs to aggressively push for fiber-based broadband connectivity along with associated infrastructure. The government should also speed up the rural electrification process to ensure reliable connectivity. It is unfortunate that due to insufficient power supply, the structured video lesson schedules cannot be followed up for days at a stretch.

- Poor infrastructure network: rural areas tend to have poor physical infrastructures and modes of transport. Reaching remote schools especially during the rainy seasons is both difficult and expensive in terms of money and time. Also the team conducted a comprehensive survey to understand the level of IT literacy for teachers who would become the drivers of eLearning. Accessing the schools wasn't an easy task and it has logistical and financial challenges. Further there is In adequate ICT Equipment: the 25 computers in each lab (24 plus a server) using the lab to complement maths or English and Kiswahili lessons, for large classes is difficult. The children are not able to access the portal at the same time and teachers need to be innovative in applying crucial logistical works to allow children to get access for the recommended 45 minutes per week, especially where they do not have teaching assistants and poor electricity supply. Moreover, while class teaching is possible using the new projectors and laptops it is unfortunate they are but only two per school and so teachers need to work as a team to share. Initially, the initial work of installation was a huge task as it included installing data sockets, power sockets, high-speed satellite broadband, and satellite dish, Wi-Fi, reinforcing the doors and windows in the school, and ensuring that the computers are sheltered and not exposed to rain.
- Unhealthy school environment: -school buildings in most remote and rural areas have outlived their predicted useful life and the entire school environments is quite unhealthy. This means that school children are subjected to substandard schools every day. These problems cost us the health, productivity and the intellectual growth of our children. Unhealthy Environment pose a greater threat to children than to adults. Tracking and monitoring of pupils and ensuring access to education services is a big challenge. Difficulties are also experienced in obtaining consistent attendance records as some schools recorded attendance irregularly. To counter this, sQuid uses contactless smart cards, tablets, data systems and an interactive learning platform to provide real-time data and an improved, tailored learning experience for marginalised communities. In addition the, partners had to educate the teachers on the importance of taking rollcalls [35].
- Lack of inadequate qualified ICT teachers**:** the demand for ICT learning has been tremendous and the number of teachers who are trained to teach ICT cannot meet the demand. There are more pupils willing to be taught computing skills than there are teachers to impart the skills. However the project has set elaborate ways of training teachers. Instruction of Teachers is being provided by a select team of Kenyan "ICT Champion" Teachers, whom after undergoing a capacity development program developed and delivered by Camara Kenya, have the onus to train teachers [36].
- Lack of literacy skills: marginalized and the poor in disadvantaged communities do not fully have an idea on how to use ICTs to empower and promote themselves. Low literacy rates and lack of information and weak knowledge base are some of the challenges that the projects partners had to encounter. However, the project has embarked on ToT's (Training of Trainers) who impart knowledge and experience gained from the programme back to the teachers in their respective schools as well as teaching literacy and life skills to pupils [37].
- Security and safety related issues: the fact that computers are still very expensive in Kenya makes them a target for thieves. In addition, the physical environment in most schools is so poor such that at one point the project staff had to work out how to stop ants moving into a server. [38].

The *iMlango* partners are however very determined to make the project a success. They have lined a range of plans that they intend to implement to establish ways in which the schools will be able to continue, sustain and even expand their facilities. For instance, they intend to use satellite that serves the school to serve the local community too at a small cost as well as allowing schools to charge minimal fees for

access to their labs when children are not using them[39].

CONCLUSION

In Kenya, as elsewhere, Information Communication Technology can play a significant role in equalizing opportunities for rural and marginalized communities. Thus, the government should make efforts to ensure Information Communication Technology becomes part and parcel of both the delivery and content of education, so as to minimize the disadvantage. Fortunately, Vision 2030 which, aims at facilitating Information Communication Technology as a universal tool for education and training has begun to implement strategies that will address the problems of all communities in Kenya. The project has come at the right time specially after the unrealised pledge made by the Jubilee Coalition Government that won the Kenyan election in March 2013. In its manifesto, the new government states that all children joining standard one in 2014 would each have had a laptop provided by the Kenyan Government. However there was divided opinion on whether laptops are a priority in schools. The project stalled denying school children the chance to access and use the promised laptops.

It is highly hoped that the *iMlango* project will support efforts of the Kenya government to sustain the ever increasing demand for education; enforce free and compulsory education; and offer education for industrialization in line with the vision 2030 and Constitution 2010. This can be realised by providing access to E-Resources, the Internet and e-literacy training. In addition, the Monitoring and Evaluation results will, no doubt, demonstrate that when ICT in education is done properly it has a significant impact on the quality of education. Moreover, the pupils in rural areas will have access to a hugely improved education. *iMlango* brings huge opportunity to all our pupils, and enables all children regardless of their backgrounds access to E-Learning platforms, that, until now, were a dream in remote and marginalised areas of Kenya.

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