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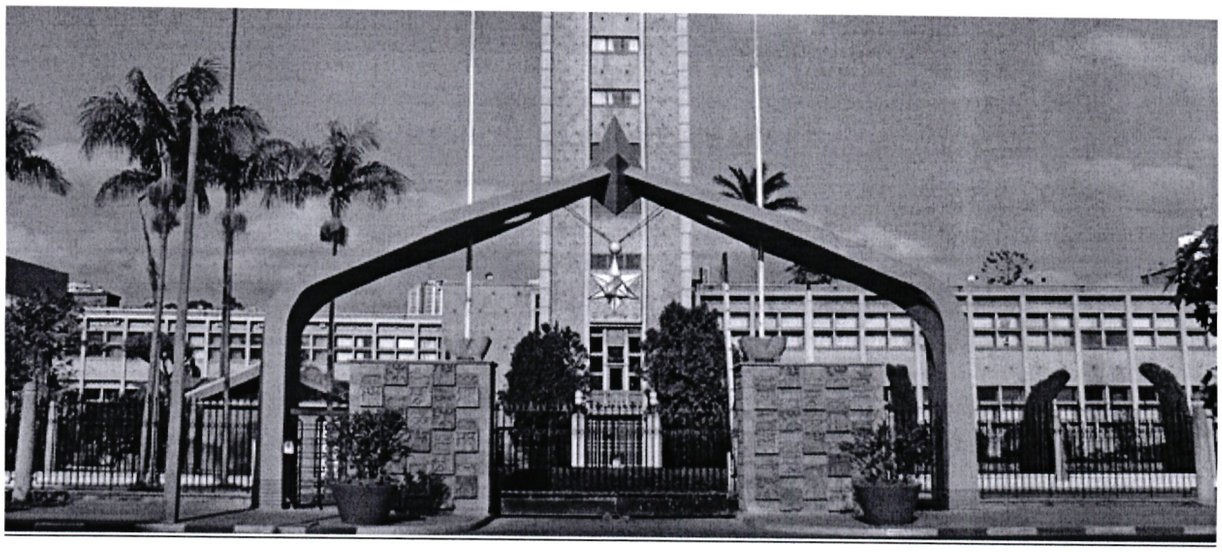

REPORT OF STUDY VISIT TO RWANDA BY THE

THE DEPARTMENTAL COMMITTEE ON EDUCATION, RESEARCH AND TECHNOLOGY

CLERK'S CHAMBERS
PARLIAMENT BUILDINGS
NAIROBI

NOVEMBER, 2013

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LIST OF ABBREVIATIONS

OLPC- ONE LAPTOP PER CHILD

MOE - MINISTRY OF EDUCATION

ICT - INFORMATION, COMMUNICATION & TECHNOLOGY

LAN - LOCAL AREA NETWORK

USD– US DOLLAR

1.0 PREAMBLE

Mr. Speaker Sir,

1.1 Mandate of the Committee

The Departmental Committee on Education, Research and Technology is established under the **Standing Order No. 216**, and has the following functions:

i) To investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the assigned Ministries and Departments;

ii) To study the programme and policy objectives of the Ministries and Departments and the effectiveness of the implementation;

iii) To study and review all legislations referred to it;

iv) To study, assess and analyse the relative success of the Ministries and Departments as measured by the results obtained as compared with their stated objectives;

v) To investigate and inquire into all matters relating to the assigned Ministries and Departments as they may deem necessary, and as may be referred to them by the House or a Minister; and

vi) To make reports and recommendations to the House as often as possible, including recommendation of proposed legislation'.

The provisions of the Second Schedule to the Standing Orders states the Terms of Reference (TOR) for the Departmental Committee of Education, Research and Technology as-

i. Education;

ii. Training;

iii. Research; and

iv. Technological Advancement.

The Standing Order also empowers the Committee to make its own selection of the subjects regarding the policy, management, administration, etc of the Ministries and Departments falling under its jurisdiction.

1.2 Committee's Membership

The Committee comprises of the following members:-

1. The Hon. Sabina Chege, M.P.**(Chairperson)**
2. The Hon. Julius Melly, M.P. **(Vice Chair)**
3. The Hon. (Prof.) Hellen Sambili, M.P.
4. The Hon. (Dr.) Wilber Ottichilo, M.P.
5. The Hon. Harrison Kombe, M.P.
6. The Hon. Yusuf Chanzu, M.P
7. The Hon. Joseph Manje, M.P.
8. The Hon. Rose Rwamba Mitaru, M.P.
9. The Hon. Anthony Kimaru, M.P.
10. The Hon. Joseph Nyumu, M.P.
11. The Hon. Jacob Macharia, M.P.
12. The Hon. Mary Seneta, M.P.
13. The Hon. Joseph M'eruaki, M.P.
14. The Hon. Dr. Susan Chebet, M.P.
15. The Hon. Eric Keter, M.P.
16. The Hon. Ceciliah Ng'etich, M.P.
17. The Hon. Mohamed Huka, M.P.
18. The Hon. Moses Injendi, M.P.
19. The Hon. Charles Muriuki, M.P.
20. The Hon. Kenneth Okoth, M.P.
21. The Hon. Geoffrey Makokha Odanga, M.P.
22. The Hon. (Dr.) Christine Ombaka, M.P.
23. The Hon. Jared Opiyo Odhiambo, M.P.
24. The Hon. Michael Kisoi Manthi, M.P.
25. The Hon. Halima Ware Duri, M.P.
26. The Hon. Dorcas Kedogo Luvalitsa, M.P.
27. The Hon. Ibren Nasra Ibrahim, M.P.
28. The Hon. Makenga Richard Katemi, M.P.
29. The Hon. Silverse Lisamula Anami, M.P

2.0 INTRODUCTION

The Constitution of Kenya 2010 provides that every Child has a right to free and compulsory quality education. It is on this basis that the Ministry of Education developed the Education act 2012 to ensure that it is in conformity with the provisions of the constitution. This Act obligates the Government to provide a conducive learning environment.

The Sessional Paper No. 14 of 2012 underscores the Ministry's commitment to competency based teaching and learning that promotes acquisition of 21st Century skills and attitudes such as critical thinking, creativity, communication, collaboration and innovation that prepares learners to competitively participate in a knowledge based economy. Integration of ICT across all levels of subjects and education is envisaged to enhance 21st Century learning skills among others.

Kenya Vision 2030 under the social pillars mandates the Ministry to provide quality education that produce a highly skilled human capital with the requisite ICT skills to competitively participate in a knowledge based economy. ICT Is identified as the catalyst to drive socio- economic transformation of Kenya into middle income country.

The implementation of the ICT integration is part of the Jubilee manifesto which outlines the need to ensure that children from Public schools also benefit with the skills that their counterpart in private schools have. The initiative will go a long way in ensuring that the inequity in the quality of education is eliminated. The project will be aimed at ensuring that the teachers are able to improve teaching skills.

In recognizing that the world today has embraced ICT in the day to day operations, the Government intends to roll out ICT programmes to ensure that it offers the quality of education that responds to the demands of the market.

The Committee undertook a study visit to Rwanda, being one of the countries in Africa that has embraced ICT in primary schools. The visit was undertaken from 7th – 10th October, 2013. The Committee learnt valuable lessons which if considered by the Ministry of Education, Science and Technology would be helpful as the Government plans to roll out the laptop project.

3.0 Overview of ICT project in Rwanda

The One Laptop per Child (OLPC) program in Rwanda was an initiative by the Government of Rwanda that was launched in 2008 and was aimed at boosting Rwanda's goal of becoming a knowledge-based society. The Committee visited the following places to study on the OLPC programme:

(i) Visit to Gahini Primary School;

(ii) Visit to APAK Primary School; and

(iii)Courtesy call to the Minister of Education, Science and Technology.

3.1 Gahini Primary and APAK Primary Schools

The Committee visited Gahini Primary School in Kayonza District (rural part of Eastern Rwanda) where the Government of Rwanda has adopted the OLPC in the public primary schools. The One Laptop per Child Program was a key project that aims at the enhancement of education through the introduction of technology in primary schools.

The Committee also visited APAK primary schools situated in Kigali City where children from Primary 4 (P4) to Primary 6 (P6) were accessing learning content from the laptop. The Ministry of Education had integrated Mathematics, Science and English learning subjects in the digital content such that the children are able to access learning materials online. The Committee was informed that when Rwanda was launching the programme initially, the Government targeted pupils from Primary one (1). The decision to alter the distribution model was arrived at upon realization that children at that age were still too young to interact with the devices effectively and their level of English language proficiency was low compared to their counterparts in Kenya.

3.2 Courtesy Call to the Minister of Education

The Committee paid a courtesy call to the Ministry of Education (MOE) and held a meeting with the Minister for Education, the Hon. Dr. Vincent Biruta. The Minister thanked the Committee for choosing Rwanda as one of the countries in the region to undertake study visit, as Kenya prepares to implement the mega laptop project to all standard one pupils in the country.

The Committee was informed as follows:

(i) The OLPC was a key project that was aimed at enhancing the quality of education through the introduction of technology in primary schools.

(ii) The OLPC enables a constructionist approach to acquisition of knowledge where students learn through graphically rich, animated, interactive digital courses hence transforming the role of the teacher from the knowledge holder to a facilitator in early access to computer skills and computer science courses. Besides the aforementioned objectives, the program was intended to expand the knowledge of pupils on specific subjects like Science, Mathematics, languages and Social Sciences through online research or content hosted on servers.

(iii)In order to successfully implement the project, Rwanda adopted a distribution policy orientation where the access to laptops was targeted from Primary 4 to Primary 6, equivalent of standard 4 to standard 6 in Kenya. The project only covered public schools whereas the private schools were meant to buy the OLPC from the government costing 200 USD per piece.

The project components entailed the school infrastructure, digital content development, capacity building of heads of schools and teachers, repair and maintenance, project sustainability and contribution in ICT growth.

(iv)The Committee was also informed that the OPLC has numerous benefits including upgrading of schools infrastructure with electricity and wiring of classes, installation of E –Solution which brings Local Area Network (LAN) and digital content which is beneficial to both pupils and local communities as they can access English courses and eBooks online. The project has also enabled the community to acquire basic ICT skills and connecting Rwanda children to the world. In particular, the community has benefitted in the access to vast online digital knowledge connecting communities to E-Government, E-Health, E-commerce and many other government services.

4.0 SUMMARY OF KEY OBSERVATIONS AND FINDINGS

1. The OLPC covered primary 4 to Primary 6 mainly due to the lack of proficiency in English since the country is formerly a francophone country.
2. The Rwanda Government has assigned an exclusive implementing department (that is not within the Ministry of Education) which deals with the rolling out of the programme.
3. The OPLC has been implemented in a phases out approach owing to the complexity of the project component which entailed the school infrastructure, digital content development, capacity building of heads of schools and teachers, repair and maintenance, project sustainability and contribution in ICT growth. This has allowed the implementing team to learn from mistakes and improve on the execution of the project.
4. The OPLC in Rwanda has incorporated a unique model that is exclusive pupil friendly and is not prone to theft. In addition, a security feature has been

installed in the device in such a way that the device becomes disenabled once it leaves the school compound.

5. The Government of Rwanda has set up wooden storage facilities to secure the devices hence reducing the cost of securing the devices.

6. The public has been sensitized on the immense importance the OLPC was bringing to the community hence the project has been devoid of politicization. Besides the capacity building of teachers has been emphasized.

7. The OLPC has covered not only public primary schools but also private primary schools. The Government has encouraged the private schools to buy the devices from the Government.

8. The National Library has also been equipped with the laptops and children can also access these facilities.

5.0 SUMMARY OF RECOMMENDATIONS

1. The Government should ensure that proper infrastructure especially electricity supply to schools is put in place before rolling out the programme. This is more so since these laptops are mainly operated using electricity, yet many schools are yet to be connected to the national grid. Where solar energy is to be used the Government should ensure efforts are speeded to install solar electricity in as many schools are possible.
2. The training of teachers should be prioritized since inadequate capacity could hamper the implementation of the project. The Government should also train the teachers on basic technical skills like trouble shooting since computers often tend to break down for one reason or another, especially in the hands of children and thus giving the teachers the ability to diagnose what the problem is likely to be, and how to fix it, is crucial.
3. The Government should come up with ways of ensuring the safety of the devices.
4. The Government should consider setting up an independent implementing secretariat to oversee the execution of the laptop project.

6.0 ACKNOWLEDGEMENTS

The Committee wishes to thank the Offices of the Speaker and the Clerk of the National Assembly for the support extended to it in the execution of its mandate. The Committee also appreciates the Secretariat for the preparation of this report.

Finally, I wish to express my appreciation to the Honourable Members of the Committee who sacrificed their time to participate in this benchmarking activity as

part of the many other, the Committee intends to undertake to ensure that the laptop project is a success.

Mr. Speaker Sir,

It is my pleasant duty and privilege, on behalf of the Departmental Committee of Education, Research and Technology, to present this report on benchmarking visit to Rwanda on the One Laptop per Child in public primary schools.

Signed .....

(HON. SABINA CHEGE, MP
(CHAIRPERSON)

Date: 14/11/13