The Challenges of Free Primary Education Implementation in Primary Schools in Bungoma County, Kenya

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Abstract:
In January 2003 the Kenyan government implemented Free Primary Education (FPE). The launch of the programme saw an increase in enrolment in primary schools which put pressure on learning resources. The FPE policy envisaged that the government would provide teaching and learning materials to all public primary schools. This paper therefore discusses challenges of implementing FPE in Bungoma East District in Kenya. A descriptive survey design was used in this study. The target population was head teachers, teachers, the school management committee chair persons and the students. Since there are rural and urban schools, stratified sampling was done to get a more representative sample. Instruments for data collection were questionnaires, interview schedule, and document analysis and observation schedules. The study found that upward trend in enrolment since the inception of FPE in 2003 led to overcrowding in class and many more schools opening up. It also found that there was lack of enough teachers to handle the increased numbers of pupils. It was also established that delayed release of FPE funds led to challenges in the FPE appropriate implementation. The findings will inform the policy makers to make more informed decisions towards implementation of the free primary education in order to achieve Universal Education.

Keywords: Free Primary Education, overcrowded classes, teacher inadequacy, teacher training

1.1 Background to the study
The introduction of FPE saw unprecedented influx of children to schools, putting a lot of pressure on the existing teaching and learning resources. The government undertook funding of all public primary schools. Since then, books and other learning equipment and school infrastructure are provided by the Government. Since the introduction of FPE in 2003, enrolment has been on the upward trend in most areas.

In the FPE there were policies to guide curriculum implementation. For instance policy recommended affordable curriculum that does not compromise quality assurance of education. The policy also laid down the requirements in terms of text book ratios of one book between three pupils in each subject in lower classes and one book per two pupils in upper primary. The school committees were to strictly buy one text book as course book in each subject per class from a list of titles given by the ministry of education. The books bought were to be in use in the particular class for three years. Communities were expected to provide storage facilities for books and all other teaching and learning materials. Teachers were also to be given guides in every subject to last for three years at a specified cost [1].

On human resources, there was need for mobilization of educational personnel, teachers and school committees and parents in order to improve access at primary level. The policy recommended proper and optimal utilisation of existing teachers as an immediate intervention to address the influx of additional pupils. The teachers were to teach in neighbouring schools and all private tuition was to be banned. The policy recommended further the merging of non viable schools in order to utilise teachers appropriately in the course of the programme. Teachers with heavy workloads were to be given incentives. All these measures were aimed at using the available resources in the most cost effective way. There was need for capacity building through in-service and re-designing of teacher training programme to cope with challenges of FPE. There was also need for rationalization of functions and deployment before recruitment of additional staff so as to fill the shortfalls [1].

On physical facilities, there was need for renovation of existing facilities and utilization of available
space in local churches and mosques. There was also need to provide additional sanitation facilities, construction of cost effective classrooms using local building materials. Physical facilities for special education, disadvantaged groups and nomadic communities were outlined in the policy. All public primary schools were required to operate within the provisions and guidelines from the MOE. To receive funding for FPE, each school was required to open two bank accounts that is, the School’s Instructional Materials Bank Account (SIMBA) and the general purpose account [1].

The aim of the government is to expand access and equity, and improve the quality of education. Kenya’s vision 2030 which was launched by His Excellency President Kabaki on 30th October 2006, put emphasis on education and training as a social strategy of investing in the people for the vision to be realised. This could only be possible through the proper utilization of teaching and learning resources. It is necessary to supervise the use and maintenance of learning resources in order to achieve quality in the standards of performance [2].

1.2 Statement of the problem

The Kenya governments aim since independence has been to provide every Kenyan child with basic rights such as education. It is in this respect that the government provided Free Primary Education (FPE) in 2003. FPE was received with a lot of enthusiasm by stakeholders in education. However, the massive enrolment put pressure on the resources that were in place. According to the 2005 MDGs status report for Kenya an Extra 1.5 million children were accessing primary education by 2004. For effective learning to take place there must be quality teaching and learning resources which are relevant and well utilized. At the same time all the stakeholders should be aware of the policy guidelines on resource utilization. Some learning resources especially books have been found on what is called the “black market.” Other books are in tatters which indicate the absence of proper storage and utilization. The main concern of this study was to find out the difficulties experienced in implementing the policy on acquisition and utilization of resources in primary schools.

2.0 Literature Review

Kenya has undertaken different programmes to ensure the attainment of UPE. This includes the School Feeding Programme (SFP) where Kenyan government has collaborated with World Food Organization. This is aimed at increasing access and retention in primary schools in Arid and Semi Arid lands (ASAL) due to harsh climatic conditions. UPE has been a major goal for the Kenyan government since independence as addressed by the 1965 Session Paper No. 10 on African socialism. The attainment of UPE is considered as a development strategy for the achievement of the vision 2030 [3]. The quest for FPE started after independence as a tool to attain universal primary education. In the 1963 elections when KANU become the ruling party, it published a manifesto which committed itself to offering a minimum of seven years of free education. In the 1969 election KANU manifesto the same commitment for offering a minimum of seven years free education was done [4]. In 1971 through a presidential decree tuition fees was abolished in districts with unfavorable geographical conditions like those found in North Eastern province and some parts in the Rift Valley and Coast provinces [4]. On 12th December 1973 during the celebration of the famous “Ten Great years of independence” another presidential decree was given which led to abolition of tuition fees in standard one to four in all public primary schools in the country [4]. In 1978, fees were abolished in all public primary education up to 1989 when the Structural Adjustment Programme(s) were introduced leading to the introduction of cost sharing in education.

In January 2003, the government re-introduced FPE. A task force constituting stakeholders identified the immediate needs for the implementation of FPE. The implementation of FPE is shared responsibility between the Government, parents, teachers and other stakeholders. It allows children access to education without discrimination. The government abolished fees and levies for tuition in all public primary schools. The Government endeavoured to pay Ksh. 1020 per child by year for the FPE programme [5]. The implementation of FPE witnessed the unprecedented influx of children to schools, which increased demands for learning resources. This called for new ways of utilizing the resources. The government is committed to the provision of instructional materials and funds to meet basic operational and maintenance costs. The ministry of education has also undertaken measures to mobilize extra resources for the development of infrastructure in regions with high poverty levels, such as ASAL regions, urban slums and other regions with high poverty levels led to massive increase in the enrolment from 5.9 million in 2002 to 7.2 million in public primary schools which put pressure on the existing physical facilities. Facilities were therefore overstretched. There is an overcrowding and high
pupil/teacher ratio (PTRs) [5]. Preliminary surveys seem to show that the existing facilities make a mockery of the free primary education programme [4].

The learning environment is poor due to overcrowding and inadequate facilities especially in urban slums ([9], 2005). Another challenge is the general misconception about FPE where stakeholders especially parents assume that they are no longer required to participate in school activities [5].

FPE has a high cost of sustainability. The current cost of FPE is beyond normal educational budget. The 2007 report, “Policies on free primary and secondary education in East Africa” shows that Kenya raised her educational budget by 17.4 % for the 2003-2004 [4]. Most of her support was from donor funding. Though the Government has benefitted from multilateral and bilateral partners like UNICEF, World Bank, UNESCO and SIDA among others, the challenge still persists because such donor funding is usually temporary [6].

Studies show that FPE is currently faced by a number of challenges that undermine the quality of education ([7], [8], [9]) and identified ones included soaring pupil numbers, teacher preparedness, increasing drop out, increasing teacher / student ratio, inadequate physical facilities, shortage of personnel, and declining community support for FPE.

Due to the soaring numbers of pupils it is felt that the main focus of FPE programme is on quantity and not quality ([10] et al 2006). As observed in the UN mellinium project countries like Kenya need to simultaneously increase acess and improve quality as the two reinforce each other.

The implementation of FPE was a challenge to the teachers. This is greatly supported the UNESCO studies report in which it was reported that many teachers still feel that they are not prepared for the introduction of FPE [7]). The large numbers of pupils has left teachers overwhelmed with bigger workloads.

An increasing drop out rate of pupils has also been reported. Whereas FPE led to an upsurge in enrolment of about 1.8 million children, cases of many of these children dropping out of school have been reported [10]. A recent survey has shown huge disparity between the number of pupils who enroll in class one and those who successfully complete the eight year study (Standard newspaper 11th June 2010).

Due to increased pupil enrolment that was not equally correlated with an increase in teacher employment an increasing teacher / student ratio was observed. The increase in enrolment brought about by FPE has led to increased pupil / teacher ratio in some schools. In some cases high pupil/teacher ratio of 80:1 has been reported. This is double the ministry’s staffing benchmark as observed by Nzomo [11].

The increased enrolment of pupils put pressure on the existing physical facilities. The increased enrolment of FPE seriously over-stretched the physical facilities in most schools. According Bell and Stub [12], a conducive teacher-learning environment is critical for any quality education to be achieved. Over enrolment has therefore undermined the teacher-learning environment.

As noted earlier, lack of correspondingly hiring teachers as the student numbers increased led to a shortage of personnel. This contributed to primary education being undermined in some areas in the country by lack of teachers and other educational facilities [10].

With the introduction of FPE, there has been a decline in community support for the same. The UNESCO study pointed out that many parents / communities misinterpreted the concept of FPE to mean that the government would undertake all the costs related to their children’s education. Consequently many parents / guardians have abdicated their parental and other social responsibilities [10]. With the reality dawning, the some of parents’ support for the policy has withered. The scenario in FPE has let to poor quality education which is seen to plunge the attainment of UPE into an illusionary state of affairs.

3.0 Research Design And Methodology

The study used descriptive survey design. The purpose of this design in the study was to describe the characteristics of a phenomenon like the attitude of the people [13]. Descriptive survey design is flexible and versatile. According to Mugenda and Mugenda [14] descriptive survey lets meaning of the research problem emerge from the respondents hence giving voice to those who are being studied as a way of empowering them.

The proposed study was carried out in Bungoma East district in Western Province. The district is divided into two administrative divisions of Webuye and Ndivisi. It is located between latitude 0°25’ North and 0°53’ North and latitude 34° east and 35° east. It lies at a height of approximately 2000 meters above sea level. The great North road pass through the district making it fairly accessible.
The study population consisted of all public primary schools in Bungoma East district. The district had ninety nine public primary schools as at March 2010, all of which were mixed primary schools. The sample population was drawn from 20 public schools. All the schools were mixed schools. Four schools were boarding whereas sixteen schools were day schools. Eight schools were urban whereas twelve were rural schools. The study population Consisted of the school head teachers, deputy head teachers, teachers, committee chair-persons from public primary schools and the District Quality Assurance and Standards Officer in the district.

The study employed stratified simple random sampling technique to select twenty schools for the purpose of gathering data. These were both rural schools and urban schools. Another grouping was based on boarding schools and day schools. Purposive sampling was used in the case of selecting the class of pupils to participate in the study. The methods were chosen because every category of the population had to be represented. The head teachers, deputy head teachers, school committee chair-persons of selected schools also formed part of the study population. The DQASO was also selected to participate in the study.

| Division | Total No. of schools | Total No. to be Sampled | % of sampled schools |
|----------|---------------------|------------------------|---------------------|
| Ndivisi  | 39                  | 8                      | 20%                 |
| Webuye   | 60                  | 12                     | 20%                 |

According to Kerlinger, 1983, 10% to 30% is a good representative sample from which findings can be drawn about a given population. For the purpose of this study a sample of 20% was taken. Therefore out of the total 99 schools in the district 20 schools were selected for the study. The accessible study population and sampled population are shown on table 3

Table 2: Table showing stratification of schools selected within each division

Table 3: Table showing the sample size in each category

| Group       | Population (N) | Total No. to be Sampled (Population (n)) | Sampling Tech. | % of sampled |
|-------------|----------------|------------------------------------------|---------------|--------------|
| Head teachers | 99             | 20                                       | Random        | 20%          |
| D/head teachers | 99             | 20                                       | Random        | 20%          |
| School committ | 99             | 20                                       | Random        | 20%          |

This study employed four instruments of data collection namely; questionnaires, interviews, observations and document analysis.

4.0 Data Presentation, Interpretation And Discussion

The study of the study sought to find out the difficulties experienced in implementing the policy on acquisition and utilization of resources in primary schools. The study through items in the questionnaire and interview schedules such class sizes, student enrolment, learning resources distribution, teachers view of parents commitment, distance the students cover to school every day, and the number pairs of uniforms each pupil has sought to answer the objective.

When free primary education (FPE) was introduced, the enrolment significantly rose from 5.9 to 7.2 million [15]. However, most schools were not equipped to handle the large numbers of students [16]. Kipkoech [17] also agrees to this when she states that the declaration of free primary education witnessed the rise in student enrollment which in turn led to strain in the existing physical resources. This has led to challenges in FPE implementation majorly due to an ever increasing enrolment in schools. All the schools visited had witnessed an increase in enrolment as shown in table 4

Table 4: Enrolment Trends

| Schools | 2003 | 2010 |
|---------|------|------|
| A       | 800  | 17   | 1200 | 27   |
| B       | 903  | 15   | 1563 | 24   |
| C       | 400  | 12   | 795  | 20   |
| D       | 400  | 14   | 1003 | 20   |
| E       | 540  | 9    | 870  | 11   |
| F       | 500  | 15   | 900  | 13   |
| G       | 454  | 12   | 655  | 15   |
| H       | 600  | 16   | 1100 | 21   |
All the schools accessed by the researcher had recorded an upward trend in enrolment. This was shown in the admission registers. The head teachers and their deputies confirmed the same. The DQASO confirmed the report given by other respondents by echoing that enrolment had gone up due to FPE. The enrolment is on an upward trend which is not in line with increase of teachers in some schools. This has adversely affected the learning process in most schools. According to the information in the questionnaires, teachers involved in the survey indicated that the major challenge is the ever increasing enrolment of pupils.

Figure 1: Class size taught by teachers
64 (57%) teachers say that their smallest class is over 60 pupils. 48 (43%) indicated that their smallest class is below 60 pupils. Therefore the classes are seriously over enrolled as supported by the figure 1 above and figure 2 below of the teachers’ view of school enrolment. From the class size the researcher concluded that there is a low teacher pupil ratio. Other studies elsewhere in Kenya from published papers do indicate that in some schools, some classes have as many as 80-100 students [16]. Teacher to pupil ratios of one to 80 - sometimes 90 – have been recorded, an aspect that places a severe burden on the country’s understaffed teaching force and worse more so in the rural areas [18].

Figure 2: School pupil enrolment status feeling by teachers
From the number of lessons taught by each teacher in schools that were visited by the researcher, there is serious understaffing. 76 (68%) teachers had over 30 lessons per week. Both the head teachers and deputy head teachers interviewed on how they had coped with understaffing claimed that teachers had devised other ways of coping for instance giving few assignments and using teaching methods which are not very taxing. According to the interview carried out with the school committee chairpersons 100% feel parents are burdened because they have to hire teachers and pay them as shown in the figure 3 below. Most teachers who responded feel teacher/parent commitment is high though teachers outshine the parents in the commitment to ensure FPE succeeds. From the interview carried out a report from the committee chairpersons revealed that most parents feel overburdened by charges to be paid to the PTA hired teachers and other operations such as tuition and examination programmes

Figure 3: Feeling of teachers on teachers / parents commitment
All the head teachers, their deputies and even the committee chair persons interviewed indicated that money given for the FPE programme is not enough. The Government on the other hand is too rigid in that, one cannot borrow money from other vote heads.

Pupils in the research whose views were sought feel there is a slight problem with distribution of learning resources as seen from figure 4.

![Figure 4: Learning resource distribution problem](image)

There is a serious problem of loss of books. In one of the schools in the survey, over 2,000 books have been lost since the programme began. The Government had policy of replacement which never works as expected in most cases because some children are orphans or come from very poor families. In cases where the school insists on the replacement policy, pupils have transferred to other schools or dropped out of school. Though head teachers through their forums have proposed clearance for pupils changing schools the problem has persisted. The loss of books is aggravated by the F.P.E policy where pupils are supposed to be given text books to carry to their homes. Some books have been found on black market which means that, they have been stolen or pupils themselves make arrangement with some people to sell the books meant for FPE programme.

Another major problem encountered in acquisition and utilization of learning materials is tearing of textbooks. Pupils carry books using paper bags and have to walk some distance from home to school as shown in figure 5.

![Figure 5: Distance of home from school walked by pupils](image)

Head teachers and deputy head teachers attributed the loss of books to pupils forgetting them as they play on their way home. More loss was recorded in day schools more than boarding schools. Some books which are colorful are mishandled by pupils who cut out colorful pictures. From figure 6, it will be observed that most of the parents are peasant farmers and therefore may not be able to afford good bags for their children for carrying books.

![Figure 6: Pupils' parents occupation](image)

Though most pupils whose opinion was sought 82 (76%) had both parents alive, their purchasing power was low as most of them had no formal employment. Such parents were also unable to replace books lost by their children. The poverty index is further emphasised by the fact that most pupils interviewed as seen from the figure 7 below pupils had only one pair of uniform.
Lack of uniform has been a setback to FPE as uniform provision is the responsibility of the parents. However as much as the parents have low purchasing power, all the head teachers interviewed indicated that FPE has sort of created laziness among parents who have not owned the programme.

Frequent change of syllabus has also been a major challenge on acquisition and utilization of learning resources. The government should avoid unplanned change of syllabus so that the learning materials can be used maximally. A subject such as social studies has undergone many changes which render some materials useless. Apart from syllabus change 100% of head teachers indicated that the book for social studies is too bulky for young children especially in lower primary. Textbooks that were purchased in the first three years of FPE were kept on shelves when the ministry of education revised the syllabus and the schools ‘started a fresh to acquire new textbooks.

In some schools some learning materials especially manila papers are not used because of high work load on the side of teachers. Some teachers are scared of taking books to class or do not give pupils to carry to their homes because of wear and tear and losing the same.

14 (70%) of the head teachers interviewed indicated that the storage is a major problem especially in adverse weather conditions like floods and storms which rip off roofs. In some cases, termites have destroyed learning materials when schools close. In all the schools surveyed (20) only sixe 6 (30%) had a library. In some schools books were put in cartons and put on the floor in a room which acted as a book store or in the Deputy Head Teachers’ office. A report from all head teachers indicated that though the government gave out some money to purchase cupboards for the storage of books, this has not solved the problem of storage because the wooden cupboards are not adequate.

Many head teachers interviewed claimed that the release of the funds did come many a time when the term was long gone hence making learners not to benefit fully from the newly acquired resource. This is also ascribed to by the UNESCO study that said that though provision of text books was a great achievement of FPE disbursement of funds was not done on time [6].

All the head teachers (100%) interviewed feel more money should be given especially on general purpose account due to the ever increasing enrolment. More teachers should also be employed. The same teachers feel that frequent transfer of Head teachers interfere with monitoring of learning resources and project progress. All the committee chairpersons held the same view confirming the report given by the head teachers. From the education office the DQASO also felt that school funds should be increased for the success of FPE. A research carried out in Machakos by Asyago on challenges facing the FPE management in 2005 does confirm that 95% of the head teachers felt that funds allocated to FPE were not adequate [19]. This is in conformity with the views of the head teachers and school chair persons of public primary schools in Bungoma East.

Summary, Conclusions And Recommendations

The study sought to find out the difficulties experienced in implementing the policy on acquisition and utilization of resources in primary schools. Enrolment is on the increase which has led to shortage of teachers which has put a lot of burden on parents and teachers as well. Teachers have had to content with high teaching workloads. Parents have been forced to employ teachers to lessen the understaffing problem. Even though parents have contributed towards learning resources provision, teachers interviewed indicated that FPE has somehow created laziness among a good number of parents who have not owned the programme.

Frequent change of syllabus has also been a major challenge on acquisition and utilization of learning resources. A subject such as social studies has undergone many changes which has rendered some materials useless. Another major problem encountered in acquisition and utilization of learning materials is tearing of textbooks. Pupils carry books using paper bags and have to walk some distance from home to school. With this was the challenge of replacement of worn out and lost resources. The Government policy of replacement of lost resources
was a challenge to implement. It hardly worked as expected in most cases because some children are orphans or come from very poor families. In cases where the school insisted on the replacement policy, pupils ended up transferring to other schools or dropping out of school. The study found out that the release of the funds did come many a time when the term was long gone. This led to challenges to not only resources management but also human resource management. Teachers also felt that frequent transfer of Head teachers did interfere with monitoring of learning resources and project progress. Another challenge was staff to conduct in-service programmes. It was found that many of the education officials to facilitate the in-service programmes suffered as a result of Teacher Advisory Centres (TAC) Tutors who were to facilitate the in-service programmes being redeployed elsewhere. This created shortage of manpower.

A. 5.0 Conclusions

Numerous challenges persist on implementation and utilization of learning resources. The upward trend in enrolment since the inception of FPE in 2003 has led to overcrowding in class and many more schools opening up. This has been complicated by the lack of enough teachers to handle the ever increasing number of pupils. Things have not been made better either by the release of FPE funds that has challenged the planning for the FPE appropriate implementation. Even where resources have been acquired their maintenance has been hard to implement due to policy that hardly recognises the reality on the ground on the learners’ status. The frequent changes in the syllabus have led to some resources just going to waste before their return on investment has been realised.

6.0 Recommendation

FPE has been perceived to be a good program that has allowed many children to access basic education despite the fact those teachers believe the programme to be burdensome. Both teachers and pupils believe there is need to provide more funding towards the FPE programme especially in line with provision of resources. It is believed that FPE has room for being improved and enhanced to cover more areas and items for learners, teachers and school resources as well. However, some parents are of the view of teachers should be sensitized to play their role well towards supporting the education.

References

[1] Government of Kenya (2003) Report of the Task Force on implementation of free primary education MOEST. Nairobi Jomo Kenyatta Foundations
[2] Olembo J. O., Wanga P. E. and Karagu M. N. (1992) Management in Education. Nairobi: General printers Limited.
[3] Government of Kenya (2007) Vision 2030. The popular version. Nairobi. Government Printers.
[4] Sifuna D. 2004. The illusion of universal free primary education in Kenya. A journal of social and religious concerns.
[5] Ministry of Education (2003). Roles and responsibilities of the school instructional materials selection committee. Nairobi. Government Printers.
[6] UNESCO (2006) Challenges of implementing Free primary education in Kenya. Nairobi
[7] UNESCO (2004) Challenges of schooling in Kenya. Nairobi.
[8] Mugenda O. M (2004) A survey of primary school teachers and problems associated with FPE in Kenya.
[9] Government of Kenya (2005) Sessional paper No. 1 of 2005 on A policy framework for education, Training and Research. Nairobi. Government Printers.
[10] Gravenir, G.S.,Mukirae, N., & Ouma, G. W. (2006). The Role of African Universities in the Attainment of the Millenium Development Goals. Nairobi: Kenyatta University
[11] Nzomo J, Karuiki M, Guantain L (2001) The quality of primary education in Kenya. Some policy suggestions based on a survey of schools. Paris UNESCO
[12] Bell, R. R. and Stub, H. R. (1968) The Sociology of Education. A source book. George Town Ontario twin Dorsey Ltd.
[13] Kothari: RC (2004) Research Methodology. Methods and Techniques New Delhi. New Age International (P) limited publishers.
[14] Mugenda, O. M., & Mugenda, A. G. (2012). Research Methods: Quantitative and Qualitative Approaches. Nairobi: Acts Press.
[15] Wabwoba F., Omieno K. K., Simiyu C.N., Sisungo Z. W. (2011).The role of wireless
technologies in taking education to rural villages in developing countries. *International Journal of Information and Communication Technology Research*. Vol. 1 No. 7: 300-305

[16] Kinuthia W. (2009). Educational Development in Kenya and the Role of Information and Communication Technology. *International Journal of Education and Development using ICT*, Vol. 5, No. 2 (2009)

[17] Kipkoech L. C. (2011). Implications of primary schools’ management as change agents in the implementation of free primary education policy in Kenya: a case of Keiyo district. *International Journal of Current Research*, Vol. 3, Issue, 11, pp.016-019, November, 2011. ISSN No. 0975-833X. Available online at http://www.journalcra.com

[18] Siringi S. (2009). “Crisis As Teacher Shortage Bites” in The Daily Nation of 20 September 2009. Kenya

[19] Asyago A. B. (2005). An investigation into the challenges facing the free primary education management: The case of Machakos district Kenya. *M.ED thesis at Kenyatta university.*

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