

Consortium for Research on Educational Access, Transitions and Equity

Tracing Pupils in Kenya's Primary Schools: A Case Study of the Impact of the 2003 Free Primary Education Policy in Eight Schools in Kisii and Kajiado Districts.

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1. The Impact of Free Primary Education (FPE) on Cohort Intake and Progression Patterns at the School Level

1.1 Introduction

Kenya re-introduced Free Primary Education (FPE) policy in 2003 with the aim of establishing 'universal primary education' and to meet the EFA and MDG target of universal access by 2015 (Oketch and Rolleston, 2007). It is not the first time that Kenya has made an attempt to 'universalise' access to primary education. Similar attempts were made in 1974 and 1979 but were subsequently unsustained. It is with this view that recent implementation of FPE has been subjected to greater scrutiny by those who have questioned whether it can be sustained and what it would take to sustain it (see e.g., Oketch and Rolleston, 2007a; 2007b; Muthwii, 2004; Mukudi, 2004; Vos et al. 2004; King, 2005). This is more so the case because previous FPE related policies were mostly analysed in terms of inclusion rather than a combination of inclusion and exclusion patterns.

CREATE's aim is to ensure that there is a better understanding of the various educational zones of exclusion (see Lewin, 2007) as this may lead to early intervention for those who are vulnerable and advance sustainable 'universal access' to primary education. To advance this cause, this paper is a follow up to previous two papers (see Oketch and Rolleston 2007; and Somerset, 2007) on the subject of access to primary and secondary education in Kenya published by CREATE.

Somerset (2007) provides a comprehensive analysis of primary school enrolment trends, looking at cohort intake and progression patterns over four decades in Kenya at the national level. To complement the national analysis of enrolment and progression trends it is important to know how different schools have experienced FPE as this may provide evidence on succeeding schools and failing schools beyond that which is provided by aggregate national enrollment and progression trends.

In this report, the primary focus is to assess the impact of FPE on cohort intake and progression patterns as well as the pattern that emerge of factors that lead to exclusion such as repetition, transfers, age profile, and household characteristics at the school level. The report is based on evidence gathered during field research undertaken in two districts in Kenya during the months of July and August 2007 and a subsequent follow up in the months of July and September 2008. It was motivated in part by a review of the literature on policies on free primary education in East Africa (Oketch and Rolleston, 2007) and of earlier studies which reported that increased enrollment following the implementation of FPE in Kenya in 2003 was immediately followed by high drop-out rate which in turn adversely affected the flow of pupils in the second year of the policy in 2004. For instance, some of the early studies reported that districts which had registered a 20 per cent increase in enrolment in 2003, the year FPE was introduced, hardly recorded more than 5 per cent increase in 2004, one year after the introduction of the FPE policy (Muthwii, 2004; OWN and Associates, 2004).

In order to assess the impact of FPE on cohort intake and progression patterns at the school level, the intake and progression patterns of the FPE cohort and those of the pre-FPE cohorts are compared. The intake and progression is traced based on school enrolment registers, showing the total enrolment in each grade. For example, if a cohort started standard one in 1997, we take the enrolment at the start of the year and call it 1997 cohort intake. In 1998, this cohort will be in standard two. The total enrolment in standard two in 1998 will include those who have progressed from standard one (i.e. those who were in standard one in 1997), those who have repeated standard two (i.e. those who were in standard two in 1997 but did not progress to standard three in 1998 due to repetition), and new entrants whom we call in-transfers from other schools. In-transfers include those repeating the same grade as well as those progressing to the next grade without repeating but simply changing schools.

A total of 8 schools were selected for the study, 4 in Kisii district and another 4 in Kajiado district. A similar study was concurrently undertaken in Nyeri and Nairobi districts by Tony Somerset (see Somerset, 2008). The districts were selected to represent Kenya's major urban settlement (Nairobi district), high population density and high agricultural productivity (Kisii and Nyeri districts), and sparsely populated and semiarid/arid low agricultural potential district (Kajiado district). The selection criterion for each school in Kisii and Kajiado districts, the two districts on which this report is based was school location- such that a school in each of the following category was included: One township school, one urban school located within or nearby an informal (slum) settlement, one peri-urban-rural (semi-urban) school, and one remote rural school located in the interior of the district. The names used for schools in this paper are not the actual names of the schools visited in the two districts. The names were changed to protect the identities of the schools.

The report is organised into 2 parts. Part 1 focuses on intake and progression patterns at the school level in Kisii and Kajiado district following the implementation of FPE. Under this part, section 1 assesses the impact of FPE on cohort intake and progression patterns in Kisii district. Section 2 assesses cohort intake and progression patterns in Kajiado district. Section 3 provides the conclusion. Part 2 focuses on cohort repetition, transfers, age profiles and household characteristics patterns of the pre-FPE and FPE cohorts in each of the schools selected in the two districts.

1.2 Kisii district

1.2.1 Background

With the help of research assistants and contacts at the Ministry of Education, the following public/government schools were selected for the study in Kisii district.

Ndovu Primary School. An ex-high cost public school, located in Kisii town and drawing most of its pupils from the town's residence.

Nyati Primary School. A public school located on the peripheries of a major lowincome informal housing (slum) area within Kisii township drawing most of its pupils from that area. **Simba Primary School**. A public school in a remote rural location of reasonably high agricultural potential.

Sungura Primary School. A public school near a small rural market centre, on the main road/highway between Kisii and Kisumu towns.

1.2.2 Ndovu Primary School

Ndovu Primary School is the oldest and the largest government school in Kisii district. It draws most of its pupils from Kisii town. It was established before Kenya attained independence and only enrolled Asian and European pupils. It remained a purely Asian and Europeans only school with majority of the pupils being Asians until 1970s when the first few African pupils were allowed to enroll in the school.

District Education Board (DEB) took over the school in the early part of 1970s which facilitated the enrollment of more African pupils at the school. However, the African pupils who were enrolled during this period were those of wealthy families who could afford the high fees charged by the school. It was the most expensive public school in the town. However, in spite of being open to all populations in Kenya, it still remained mostly an Asian school until the end of the 1970s when African pupil numbers began to increase. By the 1980s, it had become mainly African school, and today, there are hardly any non African pupils enrolled in the school.

Before the implementation of Free Primary Education Policy (FPE) in 2003, enrollment was restricted by means of admission fees and other tuition and indirect costs. In addition to costs, the Headmaster of Ndovu primary school informed us that pupils could be denied entry if 'other' school requirements such as full school uniform was not met by a pupil who was seeking to join the school. This positioned the school as one that served the town's 'middle' class and out of reach by the towns 'poor' and 'poorer' groups. FPE changed all this as no child could now be denied entry into any school for lack of money or any other requirements. It meant that any child could be admitted to the school in any grade. Even when they didn't have school uniform, they could not be denied entry or sent away, but instead the parents would be encouraged by the school to buy their child school uniform as soon as it was possible.¹ The Headmaster whom we found at the school during out visit to the school in the month of July 2007 had been at the school as its Headmaster since 2004.

In 1997 total enrollment at Ndovu primary was 837 pupils, and in 2002 it was 713. In 2003, the year FPE policy was introduced it went up to 802 pupils. Three years later in 2007 it had increased to 909 pupils, but the headmaster lamented that facilities remained the same in spite of the increased enrollment. Table 1 shows the annual cohort intake between 1997 and 2007. The resulting impact is congestion that is visible, especially in lower classes (Standard 1 to Standard 5). Although there is FPE grant given to the school by the Kenya Government, it has only been sufficient to renovate and maintain the existing buildings leaving limited resources to erect new buildings to cope with increased enrollment since FPE.

¹ This information is based on my interview with the Head-Master of the school.

All classrooms are permanent but some of the buildings date back to mid 1900 when the school was first established and would require constant maintenance or replacement. Because of its urban location, the school gets new entrants everyday since FPE policy was introduced; and the frequency of enquiries by those seeking to join the school has also increased since FPE was introduced.

It was revealed to us that there is some form of 'voluntary' payments/donations made by parents to the school. These are said to help with some aspects of the running costs of the school since FPE grants is not enough. For instance, there is a feeding programme at the school that was started 3 months prior to our visit in July 2007 and which is solely run through voluntary donations by parents and teachers at the school. The feeding programme is restricted to all standard 8 pupils who prepare for Kenya Certificate of Primary Education (KCPE), the examination that marks the end of primary cycle and which is used for selection into secondary schools; and to orphan pupils whom we were informed had mostly lost their parents to HIV/AIDS.² The standard 8 are included in the programme so as to minimise time that might be wasted by them traveling back to their homes for the lunch and to guarantee that all of them have had lunch so that they can concentrate on their studies and be able to stay for after-school tutorials, if asked to in order to prepare for the highly competitive KCPE examinations which they would sit for towards the end of the year, around the month of November. The feeding programme was said to be an attraction to pupils from low socio economic background to the school.

Based on our own observation, we found the school buildings to be in reasonable condition although constant maintenance appeared necessary. The school had electricity and water. Class size seemed reasonable at 35 per class although there are numerous streams for the lower classes, leading to timetabling problems. All pupils had a desk at which to sit even if it was shared by about three to four pupils. Most pupils looked neat in their school uniforms and nearly all of them wore shoes, with some wearing stockings. Most pupils were tidy with well kept hair and showed happy faces. Each classroom had black wall for teaching, and there was school library. On the whole this school seemed to have what can be categorized as acceptable level of facilities for effective teaching and learning. My impression was that Ndovu primary school is not a school that draws its pupils from very poor families. This was confirmed by the head teacher who informed me that most of the pupils were from the town's successful businessmen/women. Most of these businessmen and women had less education but were not poor either.

Although FPE means that education is now free there are still some cost barriers, such as examination fees and the idea of voluntary donations might yet be another 'imposed' fees that parents feel the pressure to pay. Before FPE was announced pupils who wanted to join the school had to pay admission fees of Ksh.1500 (approx. US\$23) in addition to mandatory full school uniform. The admission fees and other mandatory requirements in the pre-FPE period excluded pupils from poor families from Ndovu Primary School. Since the introduction of FPE, many poorer children have sought admission and most have been accepted in the school. Poorer parents have been surprised that their children can now be accepted at the school which previously was perceived to be one for those

² Based on interview with the Head-Master and the Deputy Head-Master of Ndovu primary school.

who were not poor. FPE has also meant that older pupils have been attracted to the school. 3

Year	Number of
	Entrants
	(intake)
1997	90
1998	99
1999	92
2000	78
2001	70
2002	65
2003 (FPE Year)	96
2004	110
2005	120
2006	107
2007	122

 Table 1: Standard 1 intake at Ndovu Primary School (1997-2007)

Source: Compiled by the author from school records as provided by the school.

Intake in the pre-FPE period (1997-2002) had been varied with the lowest intake of 65 pupils in 2002 and the highest intake of 99 pupils in 1998. The lowest intake in the FPE and post-FPE period was 96 pupils in 2003 and the highest was 122 pupils in 2007 (Table 1). The annual intake appears to increase each year in the FPE and post-FPE period but was declining most of the years in the pre-FPE years. The average annual intake in the pre-FPE year was 82.3 pupils and in the FPE and post-FPE period it was 111 pupils. There was 34.8% increase in average annual standard 1 intake in the FPE/Post-FPE period.

1.2.2.2 The impact of FPE on cohort progression pattern

The cohort progression curves (Figure 1) shows that FPE had impact on the shape of the curves. For instance, the 1997 standard one intake was 90 pupils. This rose in subsequent years, peaking at 119 pupils in 2000 due to in-transfers and repeaters. It then started a downward trend, declining to 95 pupils by the time the cohort reached standard 8 due to repetition and out-transfers.

³ Based on interview with the Head –Master of Ndovu primary.



A similar trend is exhibited by the 1998 cohort who started with 99 pupils and grew to 121 by 2002. Again, this growth is attributed to in-transfers and repeaters. The immediate pre-FPE (2002) cohort intake was 65 pupils and in 2007, it had increased to 112 pupils. This indicates that retention for the 2002 cohort was good, and that there were new pupils joining the cohort along the way following the announcement of FPE. The 2003 (FPE cohort) maintained a similar pattern such that in 2007 they were up to 110 pupils from 96 pupils who had started. The 2004 cohort shows similar trend as the 2003 cohort. The intake was 110 pupils and by 2007, it had increased to 139 pupils. Overall, the shape of Figure 1 shows that FPE had a positive impact on cohort progression pattern at Ndovu Primary School. Far more pupils were being retained and many more joined the cohorts after FPE than before FPE.

1.2.3 Nyati Primary School

Nyati Primary school is located on the periphery of the main Kisii town centre. It is draws most of its pupils from the informal housing (slum) settlement where it is located. The school was established in early part of the 1970s. The buildings are permanent although some of the classes had floors which are not cemented (mud floor).

Most pupils wore school uniform but we also spotted several pupils who didn't wear school uniform. There was also indication that pupils at Nyati Primary School could come to school wearing any type of foot-wear. We only saw few pupils whom we could say were wearing proper shoes. Majority of the pupils were wearing slippers and plastic shoes. In one of the classes we visited to administer questionnaires, there was a heap of all types of footwear outside by the door, and when we asked why they were left outside, we were told that pupils were required to leave their footwear outside to keep the cemented floors clean. All pupils in the classroom were therefore bare-foot⁴.

According to the head-teacher the school was happy to be receiving FPE grant from the government. They had revamped their school library because of FPE. There was also evidence that some improvement of the buildings was being undertaken. There was land for expansion and the headmaster sounded optimistic about the future of the school in spite of the large number entrants it was attracting. All pupils sat on a desk even though they shared in groups of 4-5 pupils per desk. The classrooms looked a bit crowded and the space at the desk was barely sufficient to allow comfortable writing space for each pupil. The school didn't have electricity and there wasn't water either.

1.2.3.1 The impact of FPE on standard 1 cohort intake

Year	Number of
	Entrants
	(intake)
1997	116
1998	169
1999	115
2000	112
2001	*
2002	158
2003 (FPE Year)	139
2004	155
2005	144
2006	162
2007	160

Table 2: Standard 1 intake atNyati Primary School (1997-2007)

*Record not available

Source: Compiled by the author from records provided by the school.

Unlike Ndovu Primary School, FPE didn't have immediate impact on standard 1 intake at Nyati Primary School. As can be seen in Table 2, the intake in 2003 (FPE year) was 139 pupils, lower than intake in 1998 and 2002. However Table 1 reveals that the impact of FPE was gradual rather that a 'big bang' at Nyati Primary School. By 2004, the intake was still lower than that of 2002. However, intake in the FPE and post-FPE period continued to rise while that of the Pre-FPE period was mixed, with a high of 169 pupils in 1998 and a low of 112 pupils in 2000. In contrast, that of the FPE and post FPE period had a low of 139 pupils in 2003 and a high of 162 pupils in 2006 (Table 2). The average annual intake in the Pre-FPE period was 134 pupils while that of the FPE/Post-FPE

⁴ Based on authors observation and conversation with pupils.

period was 152 pupils. This is an increment of 13% in annual standard 1 intake following FPE policy. Compared to Ndovu Primary School's 34.8% increase in annual average standard 1 cohort intake in the FPE period, FPE period had a lower average annual intake in standard 1 intake at Nyati Primary School. This was confirmed by the headmaster to be so due to less intake restrictions/barriers at Nyati even before FPE was introduced. According to the headmaster, Nyati's enrollment as remained more or less the same following FPE because the number of pupils who leave the school is almost equal to the number of new admissions. Our assessment of intake patterns indicates that there were fewer barriers to enter Nyati Primary before FPE compared to Ndovu Primary School.

Nyati Primary School is also a high enrolling school, even before FPE as can be seen by the 1998 intake which was the highest in both Pre-FPE and Post-FPE period. Given enrollment of 158 pupils in 2002 standard 1 intake and subsequent intake following FPE, we concluded together with the headmaster of Nyati that FPE did have impact at Nyati but the impact was not a massive as might have been expected. For instance in 2003, Ndovu had enrolled 124 pupils from 99 in the previous year compared to Nyati which had enrolled 139 pupils in 2003 compared to 158 pupils in the previous year. However, while Nyati continued to have an improved intake, Ndovu only improved modestly before declining to 77 pupils in 2007 compared to Nyati's intake of 160 pupils in 2007. The decline in Ndovu was attributed to parents returning their children to private schools where they had been taken from following FPE begun to transfer them back to private academies once they were in doubt of the quality of education, following media reports that FPE had led to congestion in schools- an indication of 'shifting' phenomenon (movement of pupils between state and non state schools)

Ndovu is desirable to parents with children at Nyati but due to 'hidden' cost barriers and distance, many have opted to stay at Nyati. This group of parents, unlike those at Ndovu cannot afford private academies, and this explains the continued rise at Nyati whereas in Ndovu the intake was declining in subsequent years after FPE was implemented.

1.2.3.2 The impact of FPE on cohort progression pattern

The patterns of the curves in Figure 2 indicate that Nyati Primary School had serious cohort retention/progression problem. For instance in the Pre-FPE period, the highest intake was in 1998 at 169 pupils. A year later this number had declined to 112 pupils. It stayed relatively stable between 2000 and 2003. It dramatically rose in 2004 to 141 pupils implying there were transfers and re-entries one year after FPE had kicked in. However, by standard 8, the number was only 70 pupils. This implies that in spite of the gains made as a result of FPE, only 41% of the cohort were able to reach standard 8, the final year of Kenya's primary school cycle.



The 1998 cohort however had a better retention and progression compared to 1997 cohort, taking into account those who joined and/or left the cohort a long the way, with 63% of the pupils of the 116 pupils who started the cohort and those who joined along the way reaching standard 8.

The 2000 cohort however exhibit a rather different pattern from the 1998 cohort. It peaked at 164 pupils in 2004 from 112 pupils in 2000, attributable to FPE. It then started a downward trend reaching only 87 pupils by standard 8, the final year of Kenya's primary cycle. The 2002 cohort, a year before FPE kicked in also exhibit retention and progression problem as it dropped to 149 pupils in 2003 from 158 pupils the year before, and continued to decline to 124 pupils in 2004. This is in spite of FPE having kicked in. However, there was an apparent influx in 2005 when the 2004 cohort number suddenly shot up to 165 pupils but by 2007, the number had declined to 123 pupils. Thus, in the Pre-FPE period, the pattern that is given by Figure 2 indicates Nyati is a school that had difficulties with retention and progression, a point confirmed to us when the school was revisited in 2008.

This situation didn't improve with announcement of FPE. The 2003 cohort has a pattern similar to the 2000 cohort and the 2004 cohort shows a pattern similar to the 2002 cohort. We concluded that FPE did not improve retention and progression at Nyati. The headmaster was rather blunt by saying FPE had not increased enrolment at Nyati. The progression pattern indicates that unlike Ndovu which had an improved progression pattern in the FPE period indicating better retention/survival Nyati is a school that is both easy to enter and leave. The cohort progression pattern at Nyati indicates that attendance

is poor. This was confirmed to us during 2008 visit to the school when it was said that the school serves pupils who come and go rather frequently. There are street children and orphans who are enrolled at the school, and the school has got no capacity to meet the needs of these vulnerable pupils. Since the school is located nearer a market centre, during market days pupils simply don't show up at school as they go about selling items at the market, some do it frequently and eventually simply dropout. If FPE was meant to improve the situation, the pattern of cohort curves suggests that it didn't, partly because it is not fees alone that mattered to this category of pupils. To them, there is opportunity-cost to schooling which FPE hasn't been able to alleviate.

1.2.4 Simba primary school

Simba Primary School is an isolated rural school, situated in the interior of Kisii district and away from the main Kisii-Kisumu Towns tarmac road. It was established in early 1970s. The school looked well kept and the buildings seem to have been recently built with the use of Constituency Development Fund (CDF) by the Kenyan Government. There was a large compound with flowers beautifully planted around the block of classrooms. The school didn't have water and electricity.

The pupils had desks to sit on even if they shared them in groups of 3-4. Most pupils wore uniform. Our visit was a surprise to the school which claimed that they are not used to visitors leave alone those coming as far as the Institute of Education, University of London. They were pleased that their school had been selected as one of the cases for the study.

1.2.4.1 The Impact of FPE in standard 1 cohort intake

Enrollment in the school was generally stable because the pupils were mainly natives with only a handful orphans who had relocated to the village from elsewhere to be looked after by their relatives. This is in contrast with frequent influx of new-comers and exit in urban settlements where Ndovu and Nyati Primary Schools are both located.

Year	Number of
	Entrants
	(intake)
2002	68
2003 (FPE Year)	91
2004	86
2005	79
2006	69
2007	63

Table 3: Standard 1 intake at Simba Primary School (2002-2007)



As can be seen in Table 3 FPE had an impact on standard 1 intake. It jumped from 68 pupils in 2002, a year before FPE to 91 pupils in 2003, the year FPE was announced. This is an increase of 33.8% in standard 1 intake. The average standard 1 cohort intake in the FPE and post-FPE period is 77.6 pupils which is higher than the intake in 2002. However, instead of rising as was the case at Nyati Primary School, intake in the years after FPE was announced began to decline reaching 63 pupils in 2007 from 91 pupils in 2003. This was being attributed to stable rural population. However, it was not possible to establish by this study whether most children who should be in school were actually in-school. At Nyati Primary School increment didn't kick in 2003, the FPE year as it did at Simba Primary School and Ndovu Primary School. The immediate intake impact at Simba and Ndovu was attributed to FPE.

At Ndovu Primary School, the immediate impact was as a result of parents shifting their children from private to public schools or choosing public over private following the introduction of FPE. At Simba Primary School the rise in intake was as a result of more parents being motivated to send their children to school instead of keeping them at home. At Nyati Primary School, there was little entry barriers even before FPE, and so it didn't matter to the parents that there was FPE. This explains the slow impact of FPE on standard 1 intake at Nyati. Another reason is opportunity cost of schooling for those living around Nyati. Many parents are petty traders and older siblings care for younger siblings while parents are out in the market, another opportunity cost of schooling.

1.2.4.2 The impact of FPE on cohort progression pattern

The pattern of progression for the 2002 cohort is stable and steadily rising. FPE led to reentries along the way (Figure 3). It is also a much smoother pattern of progression compared to both Ndovu and Nyati. However, the pattern of FPE cohort progression as seen in Figure 2 is not much better than that of the pre-FPE cohort, indicating there was no massive impact of FPE on cohort progression pattern. The shape of the curve also



indicates there were no significant re-entries and transfers as cohorts progressed. Being remotely located school, this pattern is not surprising.

Overall, the initial impact of FPE on cohort intake had faded in further post-FPE period. We concluded that FPE had a modest impact at Simba Primary School compared to Ndovu Primary School and Nyati Primary School in terms of entry. Transfers and reentries appear to have occurred for the 2002 cohort but there is no evidence for these happening in the FPE and post-FPE period.

It is also interesting that retention and progression is positive at Ndovu and Simba compared to Nyati which had a major problem with retention and progression. For instance, the 2002 cohort maintained a steady rise from 68 pupils in 2002 to 75 pupils in 2003, the FPE year. This is because several pupils joined standard 2 during the FPE year. Some of these are those pupils who had dropped out before FPE was introduced and others were in-transfers. The 2002 cohort number continued to rise steadily in subsequent years reaching 97 pupils in 2007. The 2003 cohort, however, experienced some decline, from 91 pupils in 2003 to 88 pupils in 2005; and there were 86 pupils compared to the 2002 cohort who were 89 pupils. The 2004 standard 1 intake retention and progression is very similar to that of 2003 cohort, as can be seen in Figure 3. The 2005 cohort also exhibit similar trend, with enrolment starting low at 75 pupils, rising to 86 pupils in 2006 but declining to 75 pupils in 2007. It is also evident that enrollment was up in the FPE year but was lower than the FPE year in subsequent years.

WE concluded, based on Figure 3, that the impact of FPE at Simba, a rural school was not dramatic as compared to Ndovu and Nyati. However, although Simba is school in remote location it had better retention and progression. The head teacher attributed this to better academic performance at the school level by most pupils following the implementation of FPE. According to the headmaster, since the introduction of FPE, the school was able to meet its academic needs. Enrollment had stabilized below the FPE year but it is yet to be known how it will be in subsequent years. We concluded that while there was some improvement in standard 1 intake following FPE policy in 2002, subsequent years didn't show this increase. It is also clear that the rise in enrollment was not as dramatic as that experienced by Ndovu or even similar to that of Nyati. Retention and progression appeared stable, much of which is explained by native and stable rural population. Furthermore attendance was better at Simba compared to Nyati because most teachers knew the pupils and class size was smaller. It was easy to notice when a child was absent and if this was frequent, enquiry would be made with the pupil's parents or guardian.

1.2.5 Sungura Primary School

Sungura Primary School is a public school situated in rural setting but along the main tarmac road between Kisii and Kisumu, two major towns. It is also near a rural market centre which is frequented by pupils on the market day. It is therefore not as remote as Simba Primary School and not as urban as Ndovu and Nyati Primary Schools. On the market-day attendance at Sungura Primary School is said to be poor as most pupils will take farm produce, mainly bananas and tomatoes to Nyakoe, the nearby market centre.⁵

It is generally a poor school reflected in pupils dressing as compared to Ndovu and Nyati. It was surprising that it looked even poorer than the remote Simba Primary School. Most pupils didn't wear shoes, the floor of the classrooms was not cemented and was dusty, and we saw large numbers of pupils without school uniform. One teacher simply said it wasn't the type of school that even her could trust to enroll her child in. It was established in early 1970s.

⁵ Based on authors conversation with school teacher.

1.2.5.1 The impact of FPE on standard 1 cohort intake

Year	Number of Entrants
	(intake)
1999	87
2000	104
2001	111
2002	99
2003 (FPE Year)	124
2004	130
2005	100
2006	86
2007	77

Table 4: Standard 1 intake at SunguraPrimary School (1999-2007)

NB: School did not keep/retain records before 1999 Source: Compiled by the author from school records as provided to the author by the school

There was an immediate impact of FPE on standard 1 intake as can be seen in Table 4. In this regard, it is similar to Ndovu and Simba but different from Nyati. In 2002, the intake was 99 pupils and in 2003, the year FPE kicked in it went up to 124 pupils. That is an increase of 25% in standard 1 intake following announcement of FPE.

The average intake in the pre-FPE period was 100.25 pupils while that of the FPE and post-FPE was 103.4 pupils. This is only slight improvement compared to that of the other three schools. However, some years saw very dramatic rise in standard 1 cohort intake. For instance, in 2004, the intake was 130 pupils, the highest in the FPE/Post FPE period, far above the 1999 intake which was only 87 pupils (Table 4). However, by 2007, intake had declined to 77 pupils, a trend similar to that witnessed at Simba and which is attributed to a rather stable rural settlement. Overall, we concluded based on Table 4 and following a subsequent visit to the school that FPE had made some impact on standard 1 intake in the first two years (2003 and 2004) but in subsequent years, intake had declined. It is hard to tell what has happened, it is either because parents have already started giving up on the idea of FPE and not sending their children to school or that there are now no more pupils staying at home and therefore FPE has been such a success.

1.2.5.2 The impact of FPE on cohort progression pattern

Figure 4 indicates cohort progression did not improve in the FPE and Post FPE period. This was attributed to lack of transfers and re-entries into the school caused by FPE as was seen at Nyati, Ndovu and to some extent at Simba. For instance, the 1999 cohort progression pattern show a decline from 101 pupils in 2002, staying the same in 2003 (FPE year), and only slightly improving to 107 pupils in 2004. It then takes a steep

downward shape with only 60 pupils enrolled in 2007 from 107 pupils in 2004. This implies cohort survival of 56% in spite of FPE. The pattern conforms to the rampant repetition at the school, as well as high dropout. The 2000 cohort exhibit a trend similar to that of the 1999 cohort. It started with 104 pupils which declined to 86 pupils one year later before rising to 115 pupils in 2002. In 2003, it was 116 pupils, indicating that FPE did not have impact on this cohort. A downward trend then kicks in from 2004 with enrollment in 2007 of 60 pupils.

The 2002 cohort shows a different pattern, and one that demonstrate significant impact of FPE. For instance, it started with 99 pupils. This rose to 123 pupils in the FPE year. It demonstrates that FPE kicked in the rise. However, there is an immediate downward trend in subsequent years with enrollment reaching 89 pupils in 2007. This is a drop of 27.6% from the peak of 123 pupils in 2003.



We concluded based on Table 4 and Figure 4 and our interviews with the head teacher during a subsequent visit that there was some FPE impact on intake and progression at Sungura primary school. This was attributed mostly re-entries and a few transfers. However, two years after FPE had been in operation, that is 2005 onwards, the impact of FPE in influencing cohort progression pattern had disappeared.

While 2003 showed the steepest upward intake curve, it also exhibits immediate decline, because the excited about FPE among parents had been replaced by concerns over the quality of education under FPE leading to parents withdrawing their children from the school one year into FPE. For instance the intake was 124 pupils in 2003; it remained

nearly the same at 125 pupils in 2004 before declining to 95 pupils in 2005. By 2007, the 2003 cohort was 94 pupils from 123 pupils. This is a decline of 24%. Intake was highest in 2004, but intake in subsequent years was much lower. The 2005 cohort show progression pattern similar to that of the 1999 cohort. Even the 2006 cohort progression pattern doesn't appear much different from the 1999 cohort pattern of progression pattern.

Compared with the other three schools in Kisii district, the cohort progression pattern of Sungura primary school is similar to that seen at Nyati primary school and much different from that of Simba and Ndovu Primary Schools. There was impact on cohort intake but there was equally progression problem at Sungura. Like Nyati primary school, Sungura is a school that was easy to enter and easy to exit (similar entry and exit patterns as Nyati). It was also affected by its proximity to a market which meant that during market days, many pupils simply missed going to school. Frequent absenteeism eventually leads dropout. Sungura is another case of a school where opportunity-cost of schooling was not alleviated by the introduction of FPE.

Overall, ours study shows that retention was better at Ndovu than the other three schools in the District. It is Simba, the remote school that has the second best cohort retention. Cohort progression patterns at Ndovu indicated enrollments of over 100% in some years attributed to in-transfers. For Nyati, Sungura and to some extent Simba Primary schools intake was high but the higher classes saw dramatic decline, due to 'forced' repetition and/or massive dropout by those who did not see a realistic chance of making transition to secondary school. Although none of the head teacher could admit to it, we believed there were still 'hidden' costs associated with higher grades which made them unaffordable to poorer pupils. Such 'hidden' costs may include mock-examination fees, extra tuition costs and examination fees as pupils approach standard 8.

In summary, FPE had positive impact on intake in all the four schools studied in Kisii district. However, the impact varied by the type and location of the school. At Ndovu, the impact on standard 1 intake was immediate and continued in the post-FPE years. This is because there were barriers to access which were removed by FPE. At Nyati the impact was not immediate and on average annual intake was lower than that experienced at Ndovu primary School. We concluded that FPE didn't remove the opportunity costbarrier which was the main inhibiting factor at Nyati. Moreover, even before FPE, entry barriers were not strictly enforced at Nyati and might have been the case at Ndovu. It has to be noted that Nyati is located in the slum settlement and serves slum residents. The teachers are aware of this and even before FPE and were more willing to accept pupils without many 'hidden' and indirect costs compared to Ndovu. For instance, they didn't insist on full school uniform, shoes requirement. Admission fess was also much lower compared to Ndovu's US\$23.

Once FPE was announced, parents at Nyati didn't rush their children to the school whereas at Ndovu, FPE was an opportunity to join a school that was previously seen as being out of reach for the poor. Poor parents who could not sent their children to Ndovu before FPE were now keen to send their children there following the implementation of

FPE policy. In any case, the removal of the high admission fees is one factor that would account for the sudden impact of FPE on standard 1 intake at Ndovu. The other two schools, Simba and Sungura also witnessed immediate impact following FPE. However, in all cases, there is no evidence of a major 'big bang' rise in intake caused by FPE with numbers rising to more than 50%.

On cohort progression, Ndovu remained stable and even improved. It was able to take on more pupils along the way indicating there were several new entrants due to in transfers to the school and re-entries. At Nyati, FPE didn't help to improve progression. There was easy entry and easy exit with and without FPE. At Simba, there was stable pattern indicating that the situation was not terribly bad before FPE. At Sungura, there was no much improvement. It showed similar cohort progression pattern as that of Nyati. Overall, it is only Ndovu that saw increased cohort progression numbers following FPE. This was attributed to in-transfers to the school along with regular attendance requirement which account for greater survival/retention. Our assessment indicates that a school with characteristics of Nyati (i.e. urban informal settlement location) may need more than FPE to improve access and access related issues such as retention, progression and transition. It also does suggest that remote and rural schools may in fact be better than urban slum schools in terms of retention and progression. Put differently, this assessment has revealed that FPE had positive impact in rural schools than in schools located in urban informal settlements in Kisii District.

1.3 Kajiado district

1.3.1 Background

Kajiado district is different from Kisii district in many ways. Much of it is semi/arid with nomadic communities of mainly Masaai group. It is also highly sparsely populated compared to Kisii which is a high agricultural area and one of the most densely populated district in Kenya. Kajiado is not very far from Nairobi; in fact it borders Nairobi while Kisii is approximately 700 KM from Nairobi. It is also a much larger district than Kisii. We therefore expected the impact of FPE here to be different from that of Kisii; and its difference from Kisii was one of the reasons it was selected for comparison in this study.

With the help of Kajiado district education officials we identified the following schools for the study.

- **1. Pembe Primary School.** The oldest public school in Kajiado district, located in Kajiado town and drawing most of its pupils from the town and its nearby residential areas.
- **2. Mukia Primary School.** A public school that takes its name from a nearby mining and quarry plant and from where it draws most of its pupils.
- **3. Macho Primary School.** A public school located in Ngong' town which is one of the fertile regions of Kajiado districts with a large number of settler communities, also not located very far from Nairobi.
- **4. Tumbo Academy Primary School.** A private academy located in Ngong' and owned by family and operated as a business venture.

1.3.2 Pembe Primary School

Pembe Primary School is the oldest school in Kajiado district, associated with prominent members of Masaai community. It was established by colonial government in 1944. It is both day and boarding schooling. It is located not too far way from Kajiado District town although it is in the outskirts of the town centre. It is regarded as a local school that mainly serves the Masaai and those residing in Kajiado town. The school is well equipped, with its own computer for administrative purposes. The school also operates a feeding programme sponsored by World Food Programme. There are two streams for standards 4 to 8 and 1 stream each for standards 1-3. However, because of operating only one stream, classes in standards 1-3 are large and congested, with average enrollment of 80 pupils per class. Repetition is a perennial problem mainly because of the pastoralist lifestyle of the Masaai. About one half of those who start complete their primary school cycle at the school. Transfers are regular and this is because Masaai are pastoralists moving depending on season and in search of grass for their cattle. There has been a reduction in dropout since FPE. Most of the pupils looked neat in their school uniforms. Since FPE, all those who want to join the school have to be accepted. The school has

electricity. Staffing is a problem as many teachers would not want to come and teach in the semi arid area due to its hardships. The school performs well and was in the second position in the District mock examinations in 2007. All pupils wear shoes and the school provides some help to poorer pupils through a school committee to buy items such as uniform.

50 pupils enrolled at the school are those who have been rescued from interior parts of the district from early marriage or those who have run off to avoid being married off at an early age. Traditionally the Masaai maintained their strong cultural identity and shunned schooling but have increasingly turned towards schooling. The Masaai men prefer large herds of cattle as this is considered a symbol of wealth and pride than being educated.

1.3.2.1 The impact of FPE on standard 1 cohort intake

Year	Number of
	Entrants
	(intake)
1997	101
1998	110
1999	71
2000	74
2001	62
2002	53
2003 (FPE Year)	68
2004	80
2005	73
2006	93
2007	92

Table 5: Standard 1 intake at Pembe PrimarySchool (1997-2007)

Source: Compiled by the author from school records as provided to the author by the school

At Pembe Primary School the highest standard 1 intake was not during the FPE period but instead in the pre-FPE period. In 1998, standard 1 intake was 110 pupils compared to 68 pupils in 2003, the FPE year (Table 5). It is, however, clear that intake in the pre-FPE period had been declining significantly such that in 2002, a year before FPE was announced, intake was lowest at 53 pupils, having been 101 pupils in 1997 and highest at 110 pupils in 1998. Intake during the FPE year was 68 pupils, a rise of 28% from the previous year. Post FPE period saw increased annual standard 1 intake as seen in Table 5, contrary to what happed in the pre-FPE period. With these patterns we concluded that FPE had positive impact on standard 1 intake at Pembe, confirming that costs at Pembe had been a barrier before FPE was announced. The average annual standard 1 intake at Pembe in the pre-FPE period was 78.5 pupils while that of the FPE and post FPE period was 81.2 pupils. In percentage terms, FPE saw an increase in average annual standard 1 intake of 3.4%. This is much lower compared to that of Ndovu Primary school, a school with similar colonial history and status as Pemba. In some years, the impact was massive at Pembe. For instance in 2002 intake was 53 pupils while that of 2006 was 93 pupils. This is a rise of 75% in intake. It has to be emphasized, however, that the highest intake was in 1998 which is a pre-FPE period.

1.3.2.2 The impact of FPE on cohort progression pattern

The cohort progression curves of Pembe confirm that progression was improved in the FPE and post FPE period. For instance the 1997 cohort started with 110 pupils but this had declined to 71 pupils two years later in 1999. The 2002 cohort who were the immediate pre-FPE cohort started with 53 pupils. This shot up to 96 in 2003, the year FPE was introduced confirming that there was impact associated with re-entries and transfers. But it again declined to 59 by 2004 when this cohort was in standard 8 which is the final year of the primary cycle. This indicates that there was no sustained progression impact in spite of FPE.





A number of the pupils dropped out and also transferred to other schools. It was not possible to establish where the pupils went to but the likely explanation shared with the school was dropout for those who my have not envisioned a realistic chance of transitioning to secondary school after completing standard 8. The 1998 cohort enrollment in 2004 does not indicate that there was a sudden rise in enrollment because a number of the 1997 pupils were held back by repetition.

Progression appears to have been steady in the FPE years. However, there was a deliberate repetition for the 2002 cohort. For instance, the standard 1 intake in 2002 was 53 pupils. It progressed steadily rising in number to a high of 131 in 2007, indicating massive impact of FPE due to transfers and/or re-entries. 2005 saw a large rise from 66 pupils in the previous year. 2007 also saw a dramatic rise from 106 pupils in 2006 to 131 in 2007. A number of pupils transferred to the school in 2004, 2005 and 2007. This was due to FPE policy but we didn't establish if these in- transfers were those who had dropped out (re-entries) or if they are those who were coming to Pembe from other schools, including private schools. We concluded that they were both re-entries and transfers because Pembe is required by FPE not to turn away any pupil who seeks admission.

The pattern of the 2003 cohort is slightly different from that of the year before it. For instance in 2003, the standard 1 intake was 68 pupils. This rose to 75 pupils, and then to 81 pupils in subsequent year. The highest rise occurred in 2006 when it rose to 112 pupils from 81 in the previous year. It however, declined to 102 pupils in 2007, and given a dramatic rise in enrollment of the 2004 cohort from 98 pupils in 2006 to 139 pupils in 2007, it was confirmed that some of the 2003 cohort were those repeating the grade. The cohort curve of the 2004 cohort indicates that FPE attracted pupils to join Pembe and those who had enrolled were retained.

Based on Figure 5, we concluded that FPE had impact at Pembe Primary school although it wasn't a massive impact. Initial intake was slow but it picked up from 2004 when enrollment in all grades was improved. It can also be seen in Figure 5 that Pembe had steady retention and progression. Pembe exhibits retention pattern similar to that seen at Ndovu Primary School in Kisii district.

1.3.3 Mukia Primary School

As noted earlier, this is a school that draws its name from a nearby mining and quarry. It draws its pupils mainly from those families working for the quarry and the shanty town that has emerged as a result of the quarry. It is located in a very remote part of Kajiado and the roads leading to the school are mainly those accessible by the large lorries that transport the quarry and stones. However, the school appeared well built and clean, although very sandy and dusty, not surprising for the semi arid nature of Kajiado.

The school was established in 1973 and had a total enrollment of 641 pupils in 2007. The lower classes of standards 1-4 had 2 streams each while the upper classes of standards 5-8 had 1 stream each. The number of pupils in the lower streams was 60 pupils per classroom while the number of pupils in the upper classes was 40 pupils per classroom. Majority of pupils in the school are poor, and most are from the local vicinities, particularly the shanty town around the mine and quarry. Attendance is sometimes a problem as older boys stay away harvesting sand and making charcoal. School uniform is a requirement, explaining why most looked neat but the head teacher explained that he is

flexible in cases where a pupil cannot immediately afford the school uniform. Although resources are available, including being given extra support by the government under hardship school scheme, teachers are hardly attracted to the school and even those who manage to join the school, retaining them in the school is a problem. This has affected the quality of teaching according to the head teacher.⁶

Like Pembe Primary School, it also has a group of rescued pupils (these are mainly girls who have been rescued from marriage at early age or those who have run away from their homes to avoid being married off when still very young). Like Pembe, Mukia has a feeding programme, lunch and a boarding facility for rescued pupils.

1.3.3.1 The impact of FPE on Standard 1 intake

Year	Number of
	Entrants
	(intake)
2000	55
2001	58
2002	80
2003 (FPE Year)	124
2004	166
2005	135
2006	126
2007	115

Table 6: Standard 1 intake at Mukia Primary School(1997-2007)

NB: The school did not keep/retain records before 2000. Source: Compiled by the author from school records as provided to the author by the school.

There was massive impact of FPE on standard 1 intake at Mukia as can be seen in Table 6. The impact is much greater than that experienced by Pembe, a nearby school. For instance the highest intake in the Pre-FPE period reviewed was 80 pupils whereas that of the FPE and post/FPE period is 166 pupils. The lowest intake in the pre-FPE period was 55 pupils whereas that of the FPE and Post-FPE period was 115 pupils (Table 6). The average annual standard 1 intake in the Pre-FPE period was 64.3 pupils whereas that of the FPE and post-FPE period was 133.2 pupils. This implies annual standard 1 average intake rise of 107% in the FPE post-FPE period. We concluded based on Table 1 that Mukia experienced the greatest FPE impact of standard 1 intake than both Pembe and Ngon'g Township, another school in this study. It was also greater than the impact felt in Kisii schools. It can be interpreted that at Mukia FPE removed the greatest barrier to entry or that Mukia catchment area may have had the greatest challenge in enrolling pupils in the pre-FPE period due to cost barriers. Once FPE was announced and the direct cost barrier removed, many parents sent their children to school. It can also be interpreted

⁶ Based on author's interview with the headmaster.

that Mukia did not have major 'hidden' costs in the FPE and post-FPE period which would hinder parents from enrolling their child in the school.

1.3.3.2 The impact of FPE on progression

For the pre-FPE cohort of 2000, FPE had some impact on its pattern of progression. The curve in Figure 6 shows that there was improvement in 2003 which is the year when FPE was announced from 65 pupils in 2002 to 84 pupils in 2003. However, subsequent years saw this number decline such that by 2007 there were only 35 pupils of the 2000 cohort still enrolled, and this includes those who joined along the way as a result of FPE from other schools as well as repeaters.

FPE did not affect the progression pattern of the 2001 cohort. In 2002, this cohort was 56 pupils and it stayed 56 in 2003. There was increased enrollment in the cohort in 2004 to 68 pupils but then a downward trend kicked in subsequently such that by 2007, there were only 51 pupils enrolled.



The 2002 cohort who is the cohort before FPE kicked in shows a declining curve trend throughout. This is in contrast to the 2002 cohort at Pembe Primary (Figure 5) which witnessed the greatest cohort progression impact associated with FPE.

While there was massive intake in 2003 at 124 pupils at Mukia, progression was poor, indicating problems with retention. Of the 124 pupils who started, only 75 pupils were enrolled in 2005, and this number includes those who joined along the way. In 2007, the 2003 (FPE cohort) had only 64 pupils. This means that from the starting cohort, 48.4% had dropped from the school by 2007. A similar trend is witnessed in the 2004 cohort, one year after FPE kicked in. The cohort started with 166 pupils, which is the highest intake in the school under the period of the study. It then declined steeply such that by 2007, only 103 pupils were still enrolled, and this number include net gain- in other

words those who left and those who joined along the way. In total, between intake in 2003 and 2007 when the record was taken, 38% had left the cohort.

Based on Figure 6, it was confirmed that unlike Pembe, Mukia had little re-entries and intransfers into the school. The declining trend of cohort progression continued for the 2005 and 2006 intake. WE concluded from the curves in Figure 6 is that Mukia had a serious retention problem, especially in the post-FPE period, compared to the pre-FPE period. It does suggest that FPE exacerbated retention problem rather than helping to improve it, as would have been expected (i.e. FPE had a negative impact on retention at Mukia). The trend is similar to that observed at Nyati Primary School in Kisii district.

1.3.4 Macho Primary School

Ngong is rather a very different part of Kajiado District. It is not semi arid; instead it is fertile, with significant dairy farming. It has a larger settler population of farmers, mainly Kikuyu tribe alongside the Masaai communities. It also has become a suburb of Nairobi as it is not very far away from Nairobi, with a growing cosmopolitan population of various Kenyan tribes. Because of this, it has a mixture of wealthy group leaving side by side with poor and Masaai pastoralists. There are also several private academies around the thriving township, mostly serving the wealthy. Macho Primary school however, mostly serves pupils from poor background, including orphans. The school operates three streams for each class from standard 1 to standard 8. Approximately 60 pupils enrolled at the school are orphans who have lost both parents, most likely due to HIV/AIDS. Majority of pupils are from single parent families, mainly women. Its catchment areas include Mathare informal settlement (slum) and Gachagi informal settlement (slum) in Ngong town. Uniform is required, sometime a major problem for the poorest pupils. The head teacher said enrollment has gone up since FPE and the workload for teachers is very high. He lamented over lack of enough staff. The school operates a feeding programme which includes lunch sponsored by World Food Programme, although parents contribute to pay for the salaries of those who prepare the food (cooks). The head teacher said that since FPE was announced and introduced in 2003, parents attitude is that everything regarding schooling is now free, and they have become more relaxed about the costs associated with the education of their children. Facilities are not enough and the classrooms are very crowded. One stream has on average 70 pupils. Feeding programme is expensive and yet very useful. The head teacher said that most pupils only managed to have a hot meal at school and for some that would be their only major meal.

Due to a high number of private academies in Ngong area, most professionals did not have their children enrolled at Macho Primary School. This was therefore a school for the poor, much more so than Pembe Primary School. The school had water and electricity. Windows had window paints and grill. The classroom floor was cemented. Overall, the school appeared to have reasonable basic facilities.

1.3.4.1 The impact of FPE on standard 1 intake

Year	Number of
	Entrants
	(intake)
2000	152
2001	165
2002	159
2003 (FPE Year)	178
2004	189
2005	195
2006	201
2007	194

 Table 7: Standard 1 intake at Macho Primary School (2000-2007)

Source: Compiled by the author from school records as provided to the author by the school

NB: The school did not keep/retain records for the years before 2000.

Table 7 indicates that there was immediate impact of FPE on standard 1 intake jumping from 159 pupils in 2002 to 178 in 2003. The highest intake in the pre-FPE period was 165 pupils and the lowest was 152 pupils. The highest intake in the FPE and post-FPE period was 201 pupils in 2006 and 178 pupils in 2003. Table 7 indicates that there were access problems in the pre-FPE period that was improved by FPE. The average intake in the Pre-FPE year was 158.6 pupils and that of FPE and post-FPE period was 191.4 pupils. This is an annual average intake rise of 20.6% attributable to FPE. Still, the impact was not as significant compared to that experienced at Pembe and at Mukia. This may indicate that Macho Primary School had access characteristic as those seen at Nyati Primary School in Kisii district. It didn't have major access barriers in the pre-FPE period whereas Pembe appear similar to Ndovu as a school with major access barriers in the pre-FPE period.

1.3.4.2 Impact of FPE on cohort progression pattern

Macho Primary School has a better cohort progression pattern than Mukia Primary School, because it had a better retention. For instance, the 2000 pre-FPE cohort show only modest decline. It started with 152 pupils and by 2007 they were 125, which is an overall retention of 82.2%. Based on Figure 7, it was confirmed that there were very few re-entries or in- transfers, if any, as the number in 2002 for the 2000 cohort was 124 pupils and that of 2003, FPE year was only a slight increment to 128 pupils. The 2001 cohort however, witnessed some changes in cohort pattern following FPE. It had 139 pupils in 2002 which shot up to 145 pupils in 2003 which is the year FPE was introduced and then went up further to 156 pupils in 2004. But considering that it had started with 165 pupils, there was no net gain. By 2007, there were 153 pupils still enrolled in this

cohort. The 2002 cohort also didn't witness major FPE impact. This is similar to the same cohort at Mukia but different from the same cohort at Pembe. There were 152 pupils starting in 2002 and in 2003, the FPE year, it had slightly increased to 160 pupils.

The 2003 cohort exhibit a pattern different from the rest of the patterns of the other cohorts. It has steep curves indicating sudden entry and sudden exit. It started with 178 pupils which two years later in 2005, had declined to 156 pupils. It rose suddenly in 2006 to 184 pupils and was 183 pupils in 2007.



Based on Figure 7, it was confirmed that Macho Primary School experienced some improvement in cohort progression following FPE, but this was to a lesser magnitude compared to the experience at Pembe Primary School. Figure 7 however does not fully confirm that FPE made impact on retention at the school, given the shape of the pre-FPE and post-FPE cohort curves.

1.3.5 Tumbo Academy

Tumbo Academy is a different type of school from all the other schools we visited in Kajaido and Kisii districts. It is located in Ngong Division, not far from Ngong town but it is a private school. It is run by a family of educators who operate it like a business. There are several similar schools in the area. It has very good buildings; the pupils look very different from the pupils we saw in other schools in terms of their dressing and confidence. As would be expected it obviously serves children from professional family background and with reasonably high income. The school is small, class sizes are kept small, and it has several school buses, electricity and water. It is very neatly kept and the learning environment was very different from what we had observed in other schools. In

other words, it is difficult to compare Tumbo Academy with the other schools we visited. It is the only private school that allowed us to visit them and conduct our study. This was also mainly because our contact at the Education Department at Kajiado District knew the proprietor and himself didn't live far away from the school. Moreover, he had enrolled his child at this school.

Buildings at Tumbo Academy were excellent, better than at any of the schools we had visited. Each child sits on her or his own locker, not a shared desk like in the public schools we visited. Classrooms were very tidy with the teachers' desk and cupboard placed at the back of the classroom. At any given time, even if it was study time, there was a teacher present in the classroom. The teachers appeared to have known all their pupils by name and pupil-teacher ratio were kept low with each stream enrolling on average 25 pupils. This was in contrast to what we observed in the other schools where teachers were overwhelmed and lamented over larger numbers and being demoralized by the impact of FPE. It is also a young school that was going to sit for its standard 8 examination for the first time in 2007. This school has benefited from the introduction of FPE. It is one of the schools among numerous that have grown with the announcement of FPE. Its first intake was in 2003, who started at standard 1. Those who are in standard 8 did not start at the school. The head teacher says that it will be in 2010 when their standard 1 intake of 2003 sits standard 8 examinations that they will be certain on how they have moulded pupils.

Year	Number of
	Entrants
	(Intake)
2003 (FPE Year)	30
2004	53
2005	48
2006	64
2007	65

1.3.5.1 Impact of FPE on standard 1 intake

 Table 8: Standard 1 intake at Tumbo Academy (2003-2007)

Source: Compiled by the author from school records as provided to the author by the school

Note: Tumbo Academy is a new school that enrolled pupils for the fist time in the in 2003

For Tumbo Academy, the intake record is only for the FPE year. As has been said, this is a new school which had its first intake in 2003. However, it can be seen in Table 8 that cohort numbers had been rising from 30 pupils in 2003 to 65 pupils in 2007. That is an increment of 116% which percentage wise is the highest rise of all the schools visited. It is even higher than that of Mukia Primary School although in absolute numbers, the enrollment and size of Tumbo Academy is much smaller than all the other schools.

The aim of FPE was to remove cost barriers and make education in government schools free of tuition and other related costs such as those of text books and maintenance fees. Parents would be expected to withdraw their children from fees paying schools and enroll them in the free government schools. It would be expected that when education is free, fee charging schools like Tumbo Academy would struggle to recruit pupils. However, the experience of Tumbo Academy was in part motivated by the announcement of FPE. As can be seen in Table 8, finding pupils to enroll was not Tumbo's problem. It shows that FPE didn't eliminate differentiated demand or put differently encouraged differentiated demand by parents who may have felt that the education of their children could not be better achieved in the public school was affected by FPE. It is a classic case where government policy can stimulate differentiated demand by enacting a policy that makes public schooling undesirable to some parents.

1.3.5.2 Impact of FPE on cohort progression pattern

There was steady cohort progression at Tumbo Academy (Figure 8), associated with low exit/dropout and high retention rate. Figure 8 also indicate that there were in-transfers to Tumbo Academy along the way. For instance, the 2003 cohort started with 30 pupils. A year later, they had expanded to 54 pupils and in 2007, they were 64 pupils. That is an increase of 116% from the initial intake.



It is only at Tumbo Academy that all cohorts experienced continuous expansion and no decline. Based on Figure 8 it can be said that Tumbo Academy had steady retention and progression and expanded cohort caused by transfers to the school. It is a case where FPE was benefitting private fee-paying institution rather than creating challenges of recruitment as would have been thought.

1.4 Conclusion

From the cohort curves of the 8 schools in the two quite different districts, we concluded that FPE has had varying impact depending on the location of the school. For Ndovu Primary school in Kisii District which has similar historical characteristics as Pembe Primary school in Kajiado District, FPE has led to significant rise in enrollment. It means that there were significant barriers to access that have been eliminated or reduced by FPE. The two schools have also experienced greater in- transfers and some re-entries. This is because they were both selective schools in the pre-FPE period but FPE has reduced their selective leverage which has subsequently allowed pupils from poor families to join these schools. For Nyati primary school in Kisii District and Macho Primary school in Kajiado District, FPE has not made a big difference compared to Ndovu and Pembe. This is because they had lesser entry barriers in the pre-FPE period compared to Ndovu and Pembe. Mukia primary school in Kajiado District has witnessed the greatest rise in intake but also the greatest exit in the post- FPE period. This is because FPE motivated/inspired parents to send their children to the school but it also motivated them to withdraw them from the school once they felt the quality of education offered under FPE was poor and to send them to other schools, which is what explains the sudden exit.

For the rural school like Simba primary school in Kisii District and Sungura primary school, the impact has not been dramatic in both intake and progression. However, even though it is a remote school, Simba primary school had a better progression pattern than both Sungura and Nyati primary schools. This indicates that pupils in remote rural schools may in fact have better attendance and motivation to stay in school than pupils in urban slum schools.

It would have been expected that FPE would discourage attendance to fees paying schools but the case of Tumbo Academy proves this to have not been the case. If anything FPE motivated the establishment of Tumbo Academy. Tumbo Academy benefited from FPE as differentiated demand kicked in due to perceptions of declining quality in free public school which parents are said to have blamed on large class sizes.

From this study we conclude that schools that had least barriers for access in the pre-FPE period did not experience the greatest impact while those that had greater barriers experienced the greatest impact. In the former category are Ndovu and Pembe primary schools and in the later category are Nyati and Macho Primary Schools. The latter serve mainly informal settlement dwellers while the former can be classified as serving 'middle income' groups. The fact that a school is remote may not mean that it has greater access and progression problem. The case of Simba Primary school indicates that a remote

school may sometimes have stable enrollment and experience less movement in terms of entries and exit. While FPE has improved overall chances of attending a school in Kenya as the case of these 8 schools demonstrate, it has also emerged that the hardest to reach children may not be benefiting from FPE, and they seem to be found largely in schools located in urban informal settlements (slums).

2. The Impact of FPE on Cohort Repetition, Transfers, and Age Patterns- and an assessment Pupils Household Characteristics

2.1. Introduction

The purpose of Part 2 is to present an analysis of the impact of FPE, a supply side education policy on inclusion and exclusion in the CREATE Zones 1-3 in two districts in Kenya. CREATE's Zone 1 focuses on those denied access. The analysis provided in this paper provides a description as to whether and how FPE changed access in the selected eight schools. CREATE's Zone 2 focuses on those children who are excluded after initial entry, often a result of dropping out or temporary withdrawal. The descriptive analysis provided in this section focuses on Zone 3 which pays attention to those in schools but at the risk of dropping-out. Repetition and low achievement are interrelated and are pre-cursors to dropping-out.

These factors associated with exclusion in Zones 1-3 were studied based on a random sample of all standard 5 and standard 8 pupils in 4 Schools in Kisii and 4 schools in Kajiado districts in Kenya in 2007. The purpose of this sample was to assess the impact of FPE on pre-FPE cohorts (represented by standard 8 in 2007) and the FPE cohort (represented by standard 5 pupils in 2007). The random sample is one third of each standard in each of the schools visited during this study. The random sample was achieved by selecting the third or the pupils who would represent a third of the entire standard enrollment. Where there were three streams as most were, one third was randomly selected from each stream. The selection was gender sensitive. First all girls were separated from boys and one third selected from each of the sexes.

Once the sample was selected, they were separated to a different room and a questionnaire administered to them. Where it was necessary, they were assisted to understand what the question asked of them by translating the questions verbally in Kiswahili. The questionnaire covered fixed variables such as gender, age, but also random variables such as year they started school, whether they have repeated a class, how many times they had repeated, whether they had transferred from one school to another, and how many time they had transferred, and when they transferred. It also covered family background information such as number of siblings, educational attainment of parents, occupation of parents, land ownership, and who worked the farm/land. The family background questions were aimed at establishing albeit crudely or to act as proxy for household poverty.

To corroborate what was said in the questionnaire, students were asked to write an open ended essay about their life, things that made them happy at home and those that made them sad, and those things that made them happy and sad at school.

In this part, I present the response to the questions and a descriptive analysis. The descriptive analysis is mainly aimed at demonstrating the impact of FPE by comparing

the pre-FPE cohort profiles with the FPE cohort profiles, noting differences and similarities and assessing on what accounts for the differences.

In part I of this report the focus was on analysing the impact of FPE on standard 1 cohort intake and progression in the 8 schools visited. While it provided snap shot picture of the 8 schools and how CREATE Zones 1-4 were affected by FPE policy, the information was mainly on intake and did not include such inhibiting factors of progression such as repetition and household poverty. By focusing on these specific factors, this part complements the analysis on intake and progression done earlier in part I. In part 1 we concluded that there has been varied impact of FPE on cohort intake and progression depending on the location of the school. It was however noted that there wasn't a 'big bang' immediate impact in most of the schools. Even where there had been increased enrollment in the FPE period, progression was a problem. It was concluded that while initial entry had been improved as a result of FPE, Zone 2 of CREATE where a great majority of pupils withdraw after initial entry kicked in quickly in the post- FPE years. It also meant that Zones 3 and 4 of CREATE was a problem as these pupils were likely to be repeaters and low-achievers and consequently excluded from lower secondary as a result of being unable to successfully complete primary. One of the key factors that would account for problems in Zones 1-4 include drop out. Among the pre-cursor to drop out as noted on CREATE webpage is repetition and household poverty. Repetition is due to low-achievement.

The description of the schools visited was provided in part I.

As has been noted, the sample was fairly gender representative. Figure 1 shows that there was a near balance of selection resembling the gender parity in the classes we visited. In some schools boys were slightly more than boys and in others girls were slightly more than boys.



Figure 1: Gender of Standard 5 and Standard 8 in Kisii and Kajiado Schools (2007 Sample)

The rest of this part is organised as follows. In section 2 the focus will be a descriptive analysis of how FPE affected repetition in the 8 schools. Section 3 describes how FPE affected transfers and to which schools? Section 4 focuses on the age profile of the pupils. Section 5 focuses on family background, highlighting such aspects as parental levels of education attainment, land ownership, and occupation of parents linking them to the type of school attended by pupils.

2.2 Repetition in Kisii district

A major factor that leads to exclusion is repetition. Repetition is often a pre-cursor to drop out. We therefore start by comparing the magnitude of repetition in the pre-FPE and post FPE in the 8 schools visited in the two districts. Standards 5 and 8 are compared. These are the 2000 cohort representing pre-FPE period and the 2003 cohort representing FPE period respectively. In Figure 2, the highest standard repeated by all the students in the sample in all the 8 schools is presented.



Figure 2: Grade Repetition and non Repetition by Standard 5 and Standard 8 pupils in Kisii and Kajiado District (2007 Sample)

2.2.1 Ndovu primary school

As can be seen in Figure 2, more than half the pupils in standard 5 (the FPE cohort) at Ndovu primary school had repeated a class. The classes frequently repeated were standard 4 and 5. The 0 (zero) represent non repeaters and is included here to demonstrate the level of repetition relative to the class enrollment. It appears there was little repetition in standards 1 and 2 as might have been thought. Figure 2 shows that there was higher repetition the higher the class got. Pupils were three times more likely to repeat standard 4 and 5 compared to standards 1 and 3.

For standard 8 pupils (the pre-FPE cohort) only 34% compared to 46% of the FPE cohort had repeated, and standard 6 was the one most frequently repeated. This was followed by standard 7. This is because it is at these higher grades that hidden costs are greater and preparations for standard 8 final examination begins. Some pupils were held back by their schools so as to improve the school's overall standing at standard 8 examination results.

2.2.2 Nyati Primary School

In contrast to Ndovu, Nyati primary school had a very high repetition in standard 1 and less repetition in standard 3 and 4. Our sample did not show repeaters in standard 2. The explanation was that pupils came to school unprepared at Nyati compared to Ndovu. It also implies that they easily progressed through standard 2 to 4. It is in standard 5 that we over sudden start to see a rise in repetition similar to that seen at Ndovu. This is because teachers began to hold pupils back to weed out those who were too weak to continue towards standard 8.

Standard 8 at Nyati presents a different pattern compared to that seen at Kisii. Repetition appears to be evenly distributed across all standards although standard 1 shows higher repetition than at Ndovu. While repetition is greater the higher up the class at Ndovu, the reverse is observed at Nyati where it is highest in lower classes. It means that pupils were less held back at Nyati compared to Ndovu. It also means that at Nyati, most weak pupils had long dropped out given its poor cohort retention and progression pattern (see level 1 analysis Figure 2).

Comparing Ndovu and Nyati (Figure 2), it can be said that FPE did not have major impact in reducing repetition at Ndovu whereas it did at Nyati. For instance, standard 1 was repeated less frequently by both FPE and pre-FPE cohorts at Ndovu whereas at Nyati there was higher frequency of repetition in standard 1 in the FPE cohort compared to that among the pre-FPE cohort. Similar trend is seen for standards 4 and 5 at Nyati. At Ndovu, however, the FPE cohort experienced frequent repetition in standards 4 and 5 compared to the pre-FPE cohort which had a much less frequent repetition of these classes.

2.2.3 Simba Primary School

The sample of standard 5 at Simba Primary School reported no repeaters. This was odd given the remote and rural location of the school. However, this was the case because demand for places was lower at Simba due to stable rural population and the school was therefore not under any undue pressure from those transferring into the school. Because of this, it was' easy' to move up the classes even where a pupil was a low achiever compared to Kisii where low achievers found it difficult to survive through the system. Another explanation for lack of repeaters is that Simba being a rural school, most pupils came to school with nearly similar levels of academic preparedness. There would be little heterogeneity in terms of household advantage among the pupils who enrolled at Simba as compared to both Ndovu and Nyati which due to their urban location had much bigger pupils' household heterogeneity. These are reasons why no pupil reported having repeated at Simba.

For the Pre-FPE cohort, those in standard 8, repetition was not a huge problem at Simba compared to Nyati. More than 60% had not repeated a class, but more than 30% had repeated. The classes frequently repeated were standard 2 and 7 followed by standard 6 and standard 4. On this, Simba faired better than Nyati.

2.2.4 Sungura primary school

Sungura is a rural school located a long a major highway making it less remote compared to Simba primary school. As can be seen in Figure 2, 40% of the FPE cohort had repeated. The most frequently repeated classes were standards 1, 2 and 5. However, repetition was a big problem at Sungura compared to Ndovu and Simba. It was only better than at Nyati. For the Pre-FPE cohort about 62% had not repeated. The classes frequently repeated by the cohort were standards 2 and 6. On this cohort, Sungura's again faired better than Nyati.

2.2.5 Conclusion

In conclusion, it was Nyati primary school that had the worst repetition problem of the 4 schools visited in Kisii District. As was described in Part I of this report, Nyati is located in the informal settlement (slum) near Kisii town. However, it is also at Nyati primary school where FPE seem to have had positive impact in reducing repetition. This is demonstrated by the larger number of those who had not repeated in the FPE cohort compared to the pre-FPE cohort. At Ndovu Primary School, FPE appear to have increased instead of reducing repetition. At Simba Primary School, FPE also reduced repetition as no pupil in the FPE cohort reported having repeated a class.

In all the four schools visited in Kisii district, it appears school location determined the impact of FPE on repetition. This is explained by transfers, a factor that we shall turn to later in the paper. Ndovu primary school attracted larger transfers, leading to repetition. Simba primary school did not attract transfers due to its rural location, hence the less repetition. Nyati primary school attracted new entrants into standard one who otherwise would not be in school, hence the large repetition in standard 1. Based on our analysis and subsequent visit to the schools, it was confirmed that repetition was being driven by in-transfer for some schools (notably Ndovu primary School) and increased access by those who would otherwise be out of school were it not for FPE (notably Nyati primary school). In the next section, I focus on Kajiado district to assess whether patterns seen at Kisii were there too.

2.3 Repetition in Kajiado district

2.3.1 Pembe primary school

The class most frequently repeated by the FPE cohort was standard 1 and standard 4. For the pre-FPE cohort, it was standards 5, 7 and 6 that were frequently repeated. It appears that in the pre-FPE period, repetition was not there in lower classes, an indication that the school was selective. Repetition comes in the higher classes, an indication that pupils were being held back by the school in preparation for better performance in standard 8. It is in higher classes where they start to sit for Mock examination and a pupil's performance in this examination could have been used to hold them back.

In the FPE cohort, selection had been removed as FPE improved access. However, this means that weaker pupils were admitted to the school and teachers may have started to weed the weak ones much earlier at standard 1 (although the school could not admit to this as it i8s against the FPE policy). It was confirmed that repetitions in the FPE cohort were due to in-transfers who were joining the school from other schools and given the reputation of the school, some of the in-transfers entered at the same grade where they had left their previous school. We shall turn to this when we assess the level of transfer into the school in later sections of the paper.

2.3.2 Mukia primary school

52% had repeated at Mukia primary school among the FPE cohort sample. The classes most frequently repeated were standard 4 and 5, similar to what was observed at Ndovu

primary school. There was also frequent repetition in standards 1 and 3 (Figure 2). There was higher repetition in the FPE period than in the pre-FPE period. For instance, about 82% of the pre-FPE cohort reported that they had not repeated a class compared to FPE cohort of 48%. For the Pre-FPE cohort, it is standard 4, 7 and 8 that had been repeated more frequently. It is surprising that repetition was even in all these three classes indicating that most pupils were being held back. Lack of repetition in lower classes suggests that the school was selective and/or that it didn't pay attention to the level of pupils' performance in lower classes. It could also suggest that weaker students dropped out much earlier. Looking at repetition frequency in standard 4 for both FPE and pre-FPE cohorts, it can be seen that there was slightly more frequent repetition in the FPE year than in the pre-FPE year.

2.3.3 Macho primary school

About 88% of pupils in the FPE cohort had not repeated. Standard 4 was the most frequently repeated class (Figure 2). Of all the four schools studied in Kajiado District, Macho primary school had the least repetition among the FPE cohort. This was said to be due to low levels of in-transfers into the school and an improved access to the school following FPE. It means that FPE removed barriers to those who would otherwise be at the risk of dropping out.

For the pre-FPE cohort, repetition was more common compared to the FPE cohort. Only 30% of the pre-FPE cohort reported that they had repeated. Put differently, 70% had repeated compared to FPE's 12%. The classes most frequently repeated were standard 7 and 6. Frequent repetition in standard 6 and 7 signal that the school held pupils back in order to improve their standing in standard 8 examinations; however when interviewed the head teacher was not ready to admit to this. Based on Figure 1, it is evident that FPE had massive impact in reducing repetition at Macho primary school. It might be the case that FPE improved access and once enrolled, pupils were not held back even if they were low achievers. It may also mean that teachers were no longer concerned about the quality of education in the FPE period as they did in the pre-FPE period, a point that some of the teachers we talked to admitted. Given the massive impact in terms of enrollment following FPE, the numbers that would have been held back might have been too high such that there would be no space to accommodate new entrants. Macho might be a classic case where repetition was reduced due to FPE but at the expense of quality.

Higher repetition in the pre-FPE cohort could be explained by transfer and low achievement. Given the frequency of repeaters in higher classes, it can be argued that Macho was a school that had achievement problem in the pre-FPE period. The problem may have persisted in the FPE period but now teachers were less inclined to hold pupils back as FPE required that all children be enrolled in school.

2.3.4 Tumbo Academy

Given the small class size, we did not sample at Tumbo. Instead, the whole class in standard 5 and standard 8 were asked to complete the questionnaire. As can be seen in

Figure 2, there was low repetition at Tumbo among both FPE and pre-FPE cohorts. About 86% of the standard 5 pupils had not repeated and about 88% of the standard 8 cohort had not repeated.

Overall, Pembe and Mukia had reasonably low repetition in the pre-FPE cohort and it is only at Macho where repetition was high in the pre-FPE period. This might be the case since Macho's location means that it accepted pupils who came from poor households and may have been unprepared to lean when they joined the school. Many would therefore be held back to improve the schoolings academic standing. In the FPE, there was no holding them back. At Pembe and Tumbo, those who joined in the FPE were those who would have otherwise not been allowed to these schools, one of the reasons which serve to explain increased repetition in the FPE period.

2.3.5 Conclusion

We concluded that while FPE helped to reduce repetition at Macho primary where repetition had been a huge problem in the pre-FPE period, it increased repetition in the other schools. This is explained by the fact that FPE requires that no school should be selective based on any criteria. It is only at Tumbo where the background of the pre-FPE and FPE cohorts were similar; which might explain why there was no difference in repetition between the FPE and pre-FPE cohorts.

Like in Kisii district, it appears that school location matters when it comes to the impact of FPE. Where transfer was high for those who had been excluded due to school barriers, transfers may explain increased repetition in the pre-FPE cohort and new entrants who are under-prepared may explain increased repetition in the FPE period. The pattern at Tumbo Academy provides the basis that this may be a true reason for the difference between FPE repetition and pre-FPE repetition.

In the next section, we move further with repetition to look at the number of repetitions. This can be assessed by looking at how many times a pupil repeated or by looking at when they started school. In Figure 2, the focus was only on non repetition in relation to repetition and the classes frequently repeated. Figure 3 and Figure 4 enable further analysis on repetition. As can be seen in Figure 3 the majority of those who reported that they had repeated had only repeated once. As already noted from Figure 2, repetition was high at Nyati and at Macho, two schools that have comparable settlement catchment areas. Both schools serve pupils from urban informal settlement (slums) and it appears in these schools, repetition is a problem. Of interest is also that fact that Ndovu and Pembe, again two similar schools, had pupils who had repeated two and three times. This may be explained by in-transfers to these schools following FPE. It is only at Mukia that there were pupils who had repeated 4 times.



Figure 3: Number of Repetition by Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

Figure 4: The year Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools started school (2007 Sample)



2.4 Repetition: Further Analysis in Kisii district

2.4.1 Ndovu primary school

Our two cohorts ought to have started school in 2000 and 2003 to be in standard 8 and standard 5 respectively without repeating by 2007. 73% of our random sample of standard 8 reported that they had started school in 2000. That means they had not repeated any class since they started school. 18% had repeated once and 9% had repeated twice. For the FPE cohort, only 55% had started school in 2003 and stayed on without repeating a class. 35% had repeated once and 10% had repeated twice. FPE appears to have led to a rise in repetition.

2.4.2 Nyati primary school

Only 32% of our sample of those in standard 8 in 2007 had started school in 2000 (i.e. had not repeated a class since they started school). That compares poorly to Ndovu's 73%. 55% of our sample had repeated once compared to Ndovu's 18%. 10% had repeated twice and 3% had repeated thrice. At Ndovu there were no pupils in our sample who had repeated more than twice. In this regard, it is clear that there was serious progression problem at Nyati with most pupils repeating classes. For the FPE cohort, only 39% were in the correct class (i.e. had started school in 2003) and had not repeated any class. This still compares poorly to Ndovu's 55%. 45% of those in the FPE year at Nyati had repeated once while 6% had repeated twice. Compared to Ndovu where 45% of the FPE had repeated, at Nyati 61% of the FPE cohort had repeated a grade. It can be confirmed hat repetition was a major problem at Nayti both during the FPE and pre-FPE periods (Figure 3 and 4).

2.4.3 Simba primary school

Simba, the remote rural school in Kisii district, 55% of those in standard 8 at the time of our visit in 2007 had started school in 2000 and therefore had not repeated any class, compared to Ndovu 73% and Nyati's 32%. It appears therefore that although a remote rural school, Simba did much better than Nyati. 34 % had repeated once, 7% had repeated twice and 3% had repeated thrice. Overall, only 45% had repeated a class at Simba compared to Nyati's 68%. At Ndovu, only 27% had repeated a class.

For the FPE group who started school in 2003, 97% had started school in 2003 and were in standard 5. This means they had not repeated. But 3% had repeated thrice. Here Simba did much better than Ndovu where only 55% were in the correct grade and Nyati where only 39% were in the correct grade. This is unusual for a remote rural school, but it does imply that there were few re-entries and transfers into the school and those pupils were not held back. The 3% are likely to have been re-entries since that may have been out of school and were therefore those who came back to school following FPE. It can be concluded that Simba had less repetition problem for the FPE cohort compared to both Ndovu and Nyati, both of which are urban schools (Figures 3 and 4).

2.4.4 Sungura primary school

Sungura, the fourth school visited in Kisii, 61% of standard 8 pupils in our sample had started school in 2000 and therefore had not repeated. 26% had repeated once, 6% had repeated twice and another 6% had repeated thrice. On this it is second to Ndovu which had 73% in the correct grade. It did better than Simba which had 55% and much better than Nyati which had 32%. In other words, only 39% had repeated at Sungura compared to Nyati's 68% and Simba's 45%.

For the FPE cohort who started school in 2003 and were therefore in standard 5 in 2003, 61% had started in 2003 compared to Ndovu's 55%, Nyati's 39%. On this Sungura did better than both Ndovu and Nyati but worse that Simba which had 97%. At Sungura 25% of our sample had repeated once, 11% had repeated twice and 4% had repeated thrice (Figures 3 and 4).

Overall, it appears that for the FPE cohort, the rural schools in Kisii performed better compared to the urban schools. However, it has to be noted that in-transfers account for repetition in some of the schools. Repetitions at Ndovu were due mainly to in-transfer to the school and that the rural schools had less in-transfers due to their location. At Nyati, the repetition was explained less by in-transfers but more by re-entries, those who were coming back to school once FPE was announced. It would imply that there was higher dropout at Nyati's catchment area than at Ndovu and at Simba's and Sungura. Put differently, pupils at Nyati were more likely to have dropped out and re-entered following FPE compared to the other three schools. This issue will be revisited later in the report when I turn to transfers.

2.5 Repetition: Further Analysis in Kajiado district

2.5.1 Pembe primary school

At Pembe 46% of the standard 8 pupils had started school in 2000 and had not repeated any class. That means that 54% had repeated (more than half of the class). 32% had repeated once, 8% had repeated twice and 11% had repeated thrice. Repetition is likely to have been due to those transferring to the school following FPE. I shall turn to this when I look at the number of transfers and the year of transfers.

Even more interesting are those who skipped classes. 3% of our sample had joined the school in 2004 and started at class 5. This means they had skipped 4 classes. This is something that was not experienced in Kisii District schools.

For the pupils in standard 5 who had started school in 2003 (the FPE cohort), our sample showed that 39% had started in the right year and had not repeated a class. 45% had repeated once, and 8% had repeated twice. There were 6% who had skipped one class since they started in 2004 and 3% who had skipped two classes as they started in 2005 (Figure 3 and 4).

2.5.2 Mukia primary school

73% had started school in 2000 compared to Pembe's 46%. 15% had started in 1999 and had therefore repeated once. 6% had repeated twice and another 6% had repeated thrice. For the FPE cohort, 43% started in 2003 and were therefore in the correct class. Another 43% started in 2002 and had therefore repeated once. 4% had repeated twice and another 4% had repeated thrice. There was 4% who had skipped three classes as they started in 2006 and were in standard 5 by 2007. In other words, they skipped class 1-3. Here too Mukia performed better than Pembe.

2.5.3 Macho primary school

Only 31% had started school in 2000 and had not repeated a class compared to Pembe's 46%, and Mukia's 73%. It shows that Macho had the worst repetition compared to the other two schools. 58% had repeated once and 12% had repeated twice. For the FPE group who started in 2003, 81% had started school in 2003 compared to Pembe's 39%, and Mukia's 43%. Here Macho performed better than the two other schools. Only 13% had repeated once at Macho. Like Pembe, there were those who had skipped classes. 3% had skipped one class and another 3% had skipped two classes (Figures 3 and 4).

2.5.4 Tumbo Academy

At Tumbo Academy, the only private school in the study of the standard 8, 89% had not repeated any class. 8% had repeated once. There was 3% who had skipped one class. Tumbo had the highest number of pupils who had not repeated any class, followed by Mukia. For the standard 5, 87% had not repeated any class and 13% had repeated once, compared to Pembe's 39%, Mukia's 43%, and Macho's 81%. It is at Tumbo where pupils had repeated least of all the schools visited in Kajiado.

Based on Figures 2, 3 and 4, FPE appears to have impacted on schools differently. In some, it increased repetition while in others it reduced repetition. Various factors also account for repetition based on school location. In some it was transfers that account for repetition while in others it was improved access and re-entries that account for increased repetition. It also appears that the household background or the catchment area of a school determined the different patterns of repetition in the FPE and pre-FPE cohorts. It suggests that schools located in urban informal settlements face the biggest challenge. In the pre-FPE period, they had very high repetition as majority of their pupils were low achievers and might have been held back. In the FPE period, repetition is reduced but quality of education is likely to have become worse. Pupils might therefore progress through the system but learning very little. For some of the stable urban schools (e.g. Ndovu), FPE meant they were now accessible to those who were previously excluded due to cost barriers. With FPE lifting these barriers, low achievers joined and since the schools wanted to maintain their quality, some pupils are held back. Another explanation is that pupils were transferred to these schools but starting at the same grade as the school they had been to before transfers- so that they could cope with the academic level at their new school. This may explain the pattern at Ndovu and at Pembe. In such cases, FPE increased rather than reduced repetition.

I have paid much attention to transfer as explaining some of the repetition patterns. I now turn to this factor in the next section.

2.6 Transfers in Kisii district

Year	Standard 8	Standard 5
	Entrants	Entrants
2000	13	-
2001	0	-
2002	2	-
2003 (FPE)	1	13
2004	3	3
2005	8	7
2006	4	5
2007	2	3
All years	33	31

Table 1. Year of first enrolment at Ndovu Primary School of current (2007) standard 8 and standard5 pupils (random sample)

2.6.1 Ndovu primary school

From our sample of 33 standard 8 (pre-FPE group) pupils 13 had started school at Ndovu. Coincidentally a similar number of the 31 standard 5 (FPE group) had started at Ndovu. As can be seen in Table 1 only 1 pupil in our sample had transferred to the school in the FPE year. However, subsequent years saw a rise in transfers. For instance, in 2005, 8 pupils of our sample had transferred to the school. This represents 24% our sample. Total transfer to the school in the FPE and post FPE year is 18, which is 54% of our sample. It can be said therefore that there was increased transfer to Ndovu following FPE.

As for standard 5, the FPE group, transfers to the school after 2003 represents 58% of our sample. This again shows that there was a larger transfer to the school following FPE. The highest reported transfer in our sample occurred in 2005, two years after FPE was announced.

We concluded that Ndovu felt the impact of FPE as it appears to have attracted pupils both into its pre-FPE classes, represented here by standard 8 and its FPE classes represented here by standard 5.

As was noted in Part 1 analysis, Ndovu is regarded as a desirable school by parents who can afford private schools and those who cannot. Before the introduction of FPE Ndovu charged admission fees of \$23, this was unaffordable to poor parents.

Year	Standard 8	Standard 5
	Entrants	Entrants
1999	1	-
2000	19	-
2001	1	-
2002	1	-
2003 (FPE)	4	19
2004	4	2
2005	1	2
2006	0	3
2007	0	5
All years	31	31

Table 2. Year of first enrolment at Nyati Primary School of current (2007) standard8 and standard 5 pupils (random sample)

2.6.2 Nyati primary school

Of those in standard 8 in our sample, 61% had not changed school. Only 4 transferred to Nyati is 2003, the FPE year, a number higher than that of Ndovu which was only 1. Transfers to the school in the FPE and pre-FPE period represent 48% of the total enrolment in our sample. The transfers in the FPE period represent 29% of our sample compared to Ndovu where it was higher. It can be concluded from this Table that Nyati did not attract pupils as did Ndovu although, FPE led to some transfers to the school.

For standard 5 group who are the FPE cohort, 19 had started at the school. This represents 61% of our sample, leaving 38.7% to those who transferred to the school. This is lower compared to that of Ndovu which was 58% of the sample. The highest transfer of 5 pupils of our sample occurred in 2007, three years after FPE had been announced. It can be concluded based on Table 2 that Nyati had lower transfer compared to Ndovu for both the FPE group (in standard 5) and the pre-FPE group who were in standard 8 in 2007. As was noted in level 1 analysis, Nyati is a school whose catchment area is informal settlement in Kisii and would have not been as attractive to parents compared to Ndovu. It was seen as a school that was easy to enroll in and easy to exit, and it is therefore not surprising that it had lower transfers compared to Ndovu primary school.

Year	Standard 8	Standard 5
	Entrants	Entrants
2000	13	-
2002	1	-
2003 (FPE)	2	27
2004	3	1
2005	1	0
2006	6	1
2007	3	1
All years	29	31

Table 3. Year of first enrolment at Simba Primary School of current (2007) standard 8 and standard 5 pupils (random sample)

2.6.3 Simba primary school

From our sample of 29 pupils in standard 8 at Simba 13 had started school there compared to 27 of the standard 5 pupils. Only 3 of the pupils in our sample reported to have transferred from other schools to Simba among the pre-FPE cohort. However, subsequent years saw a rise in transfers. For instance, in 2006, 6 pupils in our sample had transferred to the school. This represents 20% of our sample. Total transfer to the school in the FPE and post FPE year is 15, which is 51% of our sample for the pre-FPE cohort.

For the FPE cohort who were in standard 5 at the time of our visit in 2007, 27 had started at Simba; transfers to the school in the subsequent years after FPE was 3, accounting for only 9.6% of the total sample compared to the Pre-FPE cohort where it accounted for a much higher proportion of the sample. This indicates that there was no serious impact of FPE in terms of transfers to Simba for the FPE cohort. As was noted in Part 1 analysis, Simba is a remote rural school and it is not surprising that there were no large number of pupils transferring there. However, the large in-transfer in the pre-FPE group particularly in 2006 was those coming in from other schools where they may have been denied progression into standard 7 and 8.

Year	Standard 8	Standard 5
	Entrants	Entrants
2000	19	-
2001	0	-
2002	0	-
2003 (FPE)	2	22
2004	1	1
2005	0	0
2006	5	0
2007	4	5
All years	31	28

Table 4. Year of first enrolment at Sungura Primary School ofcurrent (2007) standard 8 and standard 5 pupils(random sample)

2.6.4 Sungura primary school

19 pupils in our sample had started school there. This represents 61% of the sample. None reported to have transferred to the school in the years before FPE. In the FPE year, only two pupils transferred to the school. The highest transfer occurred in 2006 at 5 and 2007 at 4. The total transfers in the FPE period and after account for 38.7% of our sample. This is lower compared to Ndovu.

For the FPE cohort, 22 had started school at Sungura. This represents 78.6% of the sample. In this regards, Sungura is similar to Simba. Transfers to the school of 5 pupils occurred in 2007. Total transfers to the school after FPE represents 21.4% of our sample. This is much lower than that of the Pre-FPE cohort which was 38.7%. It is lower compared to the other three schools in the district.

Based on Tables 1, 2, 3 and 4 Ndovu experienced the highest in-transfers of pupils seeking enrolment at the school following FPE. This as was earlier noted is because Ndovu is a school said to be desirable to both poor and well off parents.

2.7 Transfers in Kajiado district

Year	Standard 8	Standard 5
	Entrants	Entrants
2000	20	-
2002	2	-
2003 (FPE)	3	13
2004	4	4
2005	7	4
2006	0	7
2007	1	5
All years	37	33

Table 5. Year of first enrolment at Pembe Primary School ofcurrent (2007) standard 8 and standard 5 pupils(random sample)

2.7.1 Pembe primary school

20 pupils in our sample had started school at Pembe. This represents 54% of the sample. Only 2 pupils had transferred to the school in 2002, the immediate year before FPE was announced, representing only 5% of our sample. In the FPE year 3 pupils transferred to the school which is one more than 2002, the pre-FPE year. The highest transfer occurred in 2005 at 7 which accounts for 19% of our sample. 15 pupils in our sample transferred to the school in the FPE and post FPE years. This accounts for 40% of our sample, implying that FPE induced transfers to the school.

For the FPE cohort, 13 pupils in our sample had started their schooling at Pembe. This represents 39% of the total sample, and lower compared to the Pre-FPE cohort. However, as can be seen in Table 5, there was constant transfer in the years after FPE was implemented. The highest transfer occurred in 2006 at 7 pupils, representing 21% of the sample. Total transfer to the school after the FPE year is 20, which is larger than 13 the number that started school at Pembe primary school following the implementation of FPE. Percentage wise, those who transferred to the school after FPE was 60.6% of our sample. This is much higher than the pre-FPE transfer, indicating that transfer to the pre-FPE cohort in our sample may have been restricted by the school. It does indicate that Pembe was a desirable school where most parents wanted to send their children after FPE. It also suggests that Pembe had access barriers before FPE and that FPE led to a rush to join the school. Given the pattern revealed by Table 5, it can be concluded that FPE is associated with a rise of transfers to the school.

Year	Standard 8	Standard 5
	Entrants	Entrants
1999	1	-
2000	26	-
2003 (FPE)	0	27
2005	0	0
2006	1	0
2007	4	1
All years	33	28

Table 6. Year of first enrolment at Mukia Primary School of current (2007) standard 8 and standard 5 pupils (random sample)

2.7.2 Mukia primary school

Mukia had fewer in-transfers in the pre-FPE cohort than Pembe. The number of pupils for whom Pembe was their first school was 26, representing 78.8%, a figure higher than Pembe's 54%. It was surprising that in our sample, no pupil reported having joined the school in 2003, the FPE year among the pre-FPE cohort. However, like Pembe there was only very little transfer in the pre-FPE period represented by 1 pupil in our sample. The highest transfer to the school occurred in 2007, which would be standard 8. It is unusual for pupils to transfer to a school in their final year of the primary cycle, which is also an examination year. But a number of factors can lead to this. For instance, they may be those refused to register for KCPE in their previous schools due to low academic standing. It can also be those coming to the school having been out of school or those making second attempt at KCPE.

From Table 5, only 6 pupils joined the school for the first time in the post FPE period. This represents 18% of our sample, which is much lower than 40% at Pembe.

For the FPE cohort, 27 pupils had started school at Mukia and only 1 pupil reported having transferred to the school. This implies that Mukia was not affected by FPE in terms of transfers. It would suggest that it wasn't a school that was desirable for parents to transfer their children to. Those who joined the school for the first time in the post – FPE period was 1 compared to Pembe's 20. In other words, in-transfers at Mukia account for only 3.6% of our sample compared to Pembe's 60.6%.

Year	Standard 8	Standard 5
	Entrants	Entrants
2000	13	-
2001	1	-
2003 (FPE)	5	14
2004	0	1
2005	2	4
2006	5	5
2007	0	8
All years	26	32

Table 7. Year of first enrolment at Macho Primary School of current (2007) standard 8 and standard 5 pupils (random sample)

2.7.3 Macho primary school

The number of pupils reporting having started at Macho in our sample is 13 which represent 50% of the total sample. The other 50% first enrolled at the school following FPE. 5 pupils in our sample reported having enrolled at the school in 2003, the FPE year. This is 19% of our sample. Enrollment in the FPE year was higher compared to Pembe which had 3 while Mukia had none. This may imply that a lot more children in Macho's catchment area had dropped out of school. It could also represent those joining the school from private schools. What can be concluded from Table 6 is that Macho had the highest first enrollment at the school following FPE compared to Pembe and Mukia.

For the FPE cohort, 14 out of 32 pupils in our sample had started school at Macho. This represents 43.8% of our sample. Those who came to the school following FPE represents 56.2% of our sample, compared to 60.0% of Pembe and only 3.6% at Mukia. It implies that at Macho, more pupils came to the school following FPE than at Mukia. In other words, FPE appear to have had a major impact on access at Macho. This may be because more pupils were out of school in Macho catchment area compared to that at Mukia. As we described both schools in Part 1 analysis, cost barriers prior to the implementation of FPE meant that pupils were out of school. The same can be said of Pembe, and it is likely the case that enrollment was more restricted at Pembe than at Macho. The case of Mukia suggests that FPE didn't have impact implying that it had less restrictive access prior to FPE and/or that it wasn't the school that many parents wanted to send their children to go to.

Year	Standard 8	Standard 5
	Entrants	Entrants
2000	-	-
2001	-	-
2003 (FPE)	11	8
2004	13	5
2005	4	5
2006	4	1
2007	2	4
All years	35	23

Table 8. Year of first enrolment at Tumbo Academy of current (2007) standard 8 and standard 5 pupils (random sample)

2.7.4 Tumbo Academy

Tumbo Academy is a private school that opened its doors to pupils in 2003. In their first intake, 11 pupils were enrolled in 2003. This represents 31% of their standard 8 enrollment. However, as can be seen in Table 8 enrollment went up rapidly in subsequent years. For instance, in 2004, one year after FPE had been announced, the school took in 13 pupils. This was a school that was benefiting from FPE rather than experiencing difficulties as might have been anticipated. It is a school which was started in FPE period and has enjoyed high enrollment in subsequent years. 69% of the pupils joined the school in the post FPE period.

For the FPE cohort, a similar trend as the pre-FPE cohort can be noted in Table 8. Eight pupils started at the school, which represents 34.8%. Another 15 pupils, representing 63.2% reported joining the school in the post- FPE period. While it may have been expected that FPE would affect recruitment in private schools such as Tumbo Academy, the evidence in Table 8 indicate that FPE in fact encouraged intake.



Figure 5: Transfers by Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

Figure 5 further indicates that transfers were common in all the schools. As can be seen Mukia, Simba, and Sungura had the lowest transfers. This might explain why FPE had reduced repetition in these schools. Nyati had about one half of pupils transferring from other schools. In the pre-FPE cohort, Ndovu, Macho, Tumbo and Pembe all had very high in-transfers from other schools. As seen in Figure 5, more than half of their pupils had reported transferring to these schools. This shows that these schools had barriers before FPE making it difficult to join them. Once FPE removed the barriers, many pupils sought to join the schools. It also indicates that these schools were desirable to majority. Location also matters. Since they are urban schools, they served pupils from varying household backgrounds compared to the schools that had low transfers. Most transfers occurred in standard 4, 5, 6, 7 and 8. There were fewer transfers in standard 1 and standard 2 and 3. It is only at Ndovu and Nyati that transfers were reported in standard 1.

Most pupils had transferred once (Figure 6) but there were also those who had transferred five times. This was the case at Simba and Nyati and the likely explanation could be that these were low achievers who kept moving from school to school. There were several pupils who had transferred twice and thrice in majority of the schools. All pupils at Tumbo had transferred because it was a newly established school which did start at standard one, bur with all the 8 grades. Among the FPE cohort, Simba and Mukia had the lowest transfers, and among the pre-FPE cohort it was Mukia that had the lowest intransfers followed by Nyati. It can therefore be said that in-transfers might account for most of repetition among the Pre-FPE cohorts in most of the schools. What is also clear is

that pupils move quite a bit between schools and this was happening among the FPE and Pre-FPE cohort.



Figure 6: Number of Transfers by Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)



Figure 7: Ages of Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

2.8 Age profiles in Kisii district

Figure 7 contains the age profile of the sample. In Kenya, most pupils start standard 1 at age 7 (which is the correct age). In our sample, those in standard 5 should be 11 years and those in standard 8 should be 14 years. Those who are older would be overage pupils.

2.8.1 Ndovu primary school

64% of our sample in standard 5 was 11 years and below, meaning they were in the right class at the correct age. 36% were overage. The youngest pupils were 8 years old and the oldest pupils were 13 years old. For standard 8 cohort (pre-FPE group), 58% were 14 years and below, meaning they were in the right class at the right age. 42% were overage. The youngest pupils were 12 years and the oldest were 16 years.

It can be concluded therefore that Ndovu had overage problem. The problem was more serious among the pre-FPE cohort than the FPE cohort. However, over 50% of pupils in both cohorts were in the right class for their ages.

2.8.2 Nyati primary school

45% of standard 5 pupils were 11 years and below, meaning they were in the correct class for their age. That implies that more than half the pupils in the class were overage. The oldest pupils were 14 years and the youngest were 10 years.

For the standard 8 cohort, 74% were 14 years and below, meaning they were in the correct class for their age. The youngest pupils were 13 years and the oldest were 17

years. It seems Nyati did better that Ndovu among the pre-FPE cohort by having 74% in the correct class compared to Ndovu's 58%. Also unlike Ndovu where overage was a problem in the pre-FPE cohort, at Nyati it was a major problem among the FPE cohort. More than half the pupils in the FPE cohort were overage. This was due to re-entries and entries following FPE announcement. The fact that majority of pupils in standard 8 were of the right age for their class might mean low achievers would have dropped out and transfers did not bring in older pupils. The school might have been strict in enrolling older pupils. Overage pupils tend to be as a result of starting school late (lack of access) or re-entry (temporary withdrawal) or repeaters (low achievers).

2.8.3 Simba primary school

Only 26% of pupils in our sample were 11 years and below in standard 5. None was younger than 11 years. This implies that 74% were overage (12-16 years). The oldest pupils were 16 years. Compared to Ndovu and Nyati, Simba had a serious overage problem. This may be explained by lack of strict age to enter schools. Being a remote rural school, parents may have not even been aware of the age when their children should start school. Also, their growth might have been stunted hence older pupils looking younger compared to urban pupils.

For the pre-FPE cohort, 44% were aged 14 years and below. The youngest pupils were 12 years and the oldest were 17 years. Again, it can be said that less than half were in the correct class compared to Nyati where 74% were in the correct class. Simba show serious overage problem.

2.8.4 Sungura primary school

Only 13% of the pupils in our sample were 11 years and below in standard 5. This was the worst case of the four schools we visited in Kisii District. This school has an extremely serious overage problem. The youngest pupils were 10 years and the oldest were 16 years.

For the pre-FPE cohort, 46% were 14 years and below, meaning they were in the correct class. While this is still less than half the sample it was much better than the FPE cohort. The youngest pupils were 12 years and the oldest pupils were 17 years. The problem here must have been pupils coming to school at an age of their choice. It is possible that most pupils in the catchment area start school generally older than the expected age of 7 years. Overall, overage is a major problem in all the schools. It is worse at Sungura followed by Simba. It can be concluded that the rural schools had a major overage problem compared to urban schools.

2.9 Age profiles in Kajiado district

As was noted in Part I analysis, Kajiado district is very different from Kisii district. It is a much larger and semi arid/arid district which is sparsely populated compared to Kisii which is of high agricultural potential and densely populated. There are nearly no climate variations in Kisii whereas some parts of Kajiado such as Ngong division is of high agricultural productivity and has a metropolitan population while other parts are inhabited by Masaai nomadic communities. These differences are likely to come into play in determining pupils' enrollment age.

2.9.1 Pembe primary school

This is a school that has similar history to Ndovu in Kisii district and comparable location characteristic. However, unlike Ndovu only 18% of the pupils in our sample were aged 11 years and below in standard 5. This means that 82% of the pupils in our sample were overage. The youngest pupils were 10 years and the oldest 18 years. These results are not surprising given the pastoralist lifestyle of the Masaai community.

For the pre-FPE cohort, only 37 % were 14 years and below compared to Ndovu's 58 %. The youngest pupils were 13 years and the oldest pupils were 20 years. Majority of the pupils were aged 15 and 16 years (Figure 7). From Figure 7, it can be concluded that Pembe had a major overage problem, than any of the schools in Kissi district in the FPE cohort. Even the pre-FPE cohort didn't fair much better as only 37% were in the right class for their age.

2.9.2 Mukia primary school

19 % of the pupils in our sample were 11 years and below, meaning they were in the right class for their age. The youngest pupils were 10 years and the oldest were 16 years. It can be said that Mukia was no worse or better than Pembeon overage problem.

For the pre-FPE cohort only 12% were 14 years and below. This was the worst case of overage of all the schools in this study. This means that 88% of pupils in standard 8 were overage. This was worse that Pembe's overage of 63%. The youngest pupils were 13 years and the oldest 20 years. Majority of the pupils were aged 15 years (Figure 7). As was noted in Part I analysis, Mukia has similar characteristics are Nyati and yet it had a far worse overage problem compared to Nyati.

2.9.3 Macho primary school

50% of pupils in our sample were 11 years and below and in standard 5. This means that half the sample was in the correct grade. The youngest pupils were 9 years and the oldest were 11 years. This is much better than both Pembe and Mukia and yet Macho serves pupils from informal settlements in Ngong town. It is a poorer school compared to Pembe and yet it has much less overage problem compared to Pembe.

For the Pre-FPE cohort, 34% were 14 years and below. The youngest pupils were 13 years and the oldest pupils were 16 years. Majority of the pupils in the sample were 15 years old. It appears there was a serious overage problem among standard 8 compared to standard 5 cohorts.

2.9.4 Tumbo Academy

This is a school that was different from the other schools in the sample because it is a private academy. It is a middle level type of private school (i.e. not informal private and

not high cost private). It is the type of school that is affordable to middle income earners in Kenya (most professionals with university level education).

It is therefore not surprising that 86% of the pupils were 11 years and below in standard 5, the best of all the schools in the sample. These pupils come from households with highly educated parents and who are middle class. The youngest pupils were 8 years and the oldest 13 years. Majority of pupils were 10 years, a year younger than the national age.

For the Pre-FPE cohort, the pattern is similar to the FPE group. 90% were aged 14 years and below, again the best of all the schools. The youngest pupils were 12 years and the oldest 16 years. Again majority of the pupils were 13 years, one year younger than the national age. It can be concluded that Tumbo Academy had very little overage problem of all the schools in the study. This can be attributed to the household type that the pupils at Tumbo came from. It would be the case in similar schools across the country whereby private academies enroll pupils in class of their right age while majority of public schools have overage problems.

In conclusion, it can be said based on Figure 7 that overage is a major problem in the schools visited, and likely to be so in Kenya in general. It is a much serious problem in rural schools than in urban schools in Kisii district whereas in Kajiado district, being urban school does not make a different. Pembe is an urban school while Mukia is a remote school and yet they had similar overage problem.

The next section focuses on household factors to assess how this link and might explain the different patterns in the 8 schools studied. Since we do not have data on household poverty which is one of the factors known to lead to exclusion, we shall use crude measures of poverty (proxy factors) such as parental level of education, occupation and land ownership to assess where each of the schools fall.

The expectation is that Ndovu primary school will have pupils from fairly educated parents with secondary level. Nyati primary school will have majority of its pupils with parents who mostly have primary level education. Simba primary school will have majority who never completed primary and the same would apply for Sungura. We expect Pembe primary school to have similarities with Ndovu; Mukia with Nyati; and Macho with Nyati; and Tumbo to be in a league of its own with both parents having university level education. The family size will also correspond to the education level of the parents. The less educated parents will have larger families compared to the more educated. Rural schools will have larger families compared to urban families.

2.10 Family background in Kisii district



Figure 9: Family Size of Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

As can be seen in Figure 8 very few households had only one or two children (i.e. the respondent alone or respondent and one sibling). Of the 8 schools in our sample, Tumbo had the highest number of pupils who came from households where there was only one child or a maximum of two children. Even at Tumbo, majority reported coming from household with 3-4 children (including the respondent). Mukia had the highest number of pupils who came from household were there were 5-6 children. This is by Kenyan standard a large family. 3-4 would be common but not the case in most families. Looking across Figure 8 it can be concluded that majority of the pupils came from households which had 3-4 children as well as 5-6 children. In this category is Ndovu, Macho, Simba, Nyati. Sungura show pupils from big families. This may explain the overage problem in this school as older children would be kept longer at home looking after their younger siblings, a practice that is common in rural Kenya among larger families.

Overall, apart from Tumbo, the pupils in our sample came from families that would be considered large. Some were as large as 7-8 and others reported coming from household with 9 children, itself not unique in Kenya where population growth has been high over the past few years.



Figure 10: Father's Education of Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

Figure 10 shows that it is Tumbo that had majority of fathers with university degree in both FPE and pre-FPE cohort. Pembe had the highest number of fathers with no formal schooling. This is not surprising given that until recently, education was not considered the means of productivity among Masaai men. Owning large herds of cattle is higher in the community order of things most valued than being highly educated.

Overall, educational attainment of fathers at Pembe was low. Ndovu had majority of fathers with secondary or teachers college education. None had university degree. This would be expected given that most men in Kisii town are middle income business men and not professionals. Most highly educated professionals we were informed enroll their children in the private academies in Kisii. Macho also had fathers with low educational attainment with most children reporting they didn't know. We were informed that most children at Macho were from single parents (mostly mother) and they *don't know* response to the education level of the father may be confirmation of this. It is surprising that some pupils reported that their father had university level education.

Figure 10 shows that majority of the pupils had fathers with primary and secondary education. This was the case in both rural and urban schools, except Tumbo which had a large number of fathers with university education.



Figure 11: Mother's Education of Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

Figure 11 show that Pembe had the highest number of mothers without any formal education. Similar reason as in the case of fathers applies to mothers among the Masaai where women are married off early. Simba, the remote rural school had the highest number of mothers who had only completed a few years of primary education. This is not surprising given the rural location of the school. Most mothers who live in remote rural locations would only have had few years of education, if any. They engage mostly in subsistence agriculture. Tumbo Academy had the highest number of mothers with university degree and majority had at least secondary education. A large number of mothers at Ndovu had secondary education and unlike fathers, some had university degree. This is not unusual where some men may marry and educate their wives to university or instances where businessmen with secondary education would marry women with university education. Overall, mothers had higher educational attainment at Ndovu than fathers.

Like Pembe, Mukia had one of the highest proportion of mothers without formal schooling. Majority had completed primary among standard 5 pupils but none reported secondary level. Overall, Figure 10 indicates mothers had fewer years of schooling, with most having completed primary while most fathers had secondary education.

Figure 12: Land ownership by the Family of Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)



As can be seen in Figure 12, most pupils in our sample came from families with farming land. It is at Simba where a large number had no farming land, but this can be explained by the high population density in the area. Macho pupils came second to Simba for not having farming land, and this can be explained by the fact that they were mostly from Ngong town informal settlement. Only few pupils in Ndovu did not have farming land compared to those who had. The pattern is the same in the other schools. Only a few pupils came from households with developed plots (building land).

Overall, most of the pupils came from families that were not landless.



Figure 13: Means of Land cultivation by the Family of Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

When it comes to who tilled the land, it appears from Figure 13 that most of the pupils didn't know. However it is clear that at Tumbo Academy the pupils came from household with farm workers. As would be expected at Simba, the land was tilled by the family. The same applies to Pembe and other schools. It can be concluded that a part from Tumbo, most of the pupils, especially older ones helped with tilling the land and came from households with small farm holdings which might have been their only means of livelihood.

The question of land ownership was not restricted to where the pupil lived. They might have lived in urban area but owned land in their ancestral home. This question was aimed at assessing landlessness and household poverty although it turned out to be a more crude measure that can tell little about household wealth.

The last factor considered for household poverty was the occupation of the guardian. Here we reckoned that some parents may have guardians who supported their education and who may not have been their real parents. This was clarified to the pupils. The information gathered from the pupils is provided in Figure 14.



Figure 14: Parental/Guardian Employment of Standard 5 and Standard 8 pupils in Kisii and Kajiado Schools (2007 Sample)

As can be seen in Figure 14, schools which had the highest number of highly educated parents with up to university degree had the highest proportion of white collar guardians (professional employment). This is not surprising given the correlation between educational attainment and type of employment. Ndovu only had few guardians with professional employment reflecting the fact that majority of the parents only had secondary level education. Most reported manual work, although in this category there are likely to be those in business and farmers. But the larger number of manual guardians at Ndovu in standard 5 signal the fact that more poor parents might have been able to send their children to Ndovu following FPE than before FPE. In the Pre-FPE period, a large number were self-employed and agricultural farmers, both of which would be higher income activities than manual wage employment.

Very few guardians were in professional employment at Mukia. The majority were in agriculture and this may be nomadic cattle raising. A sizable proportion were in manual employment, most likely working at the nearby stone quarry and harvesting sand. As would be expected of rural communities, Simba and Sungura had majority engaged in agriculture and this would be subsistence agriculture.

Nyati was dominated by self-employment and manual among the Pre-FPE cohort although the FPE cohort had a sizable proportion that was of professional employment. These might have been parents who moved their children from private schools following FPE.

2.11 Conclusion

The analysis provided in this report has shown that different schools were impacted differently by FPE depending on their location and school type. For instance, at Ndovu primary school, FPE increased repetition mostly because of increased in-transfers into the school. Ndovu also had very high in-transfers in the FPE period with about half of the pupils being those who started elsewhere. This does signal that there were barriers at Ndovu that were removed by FPE, the main one being costs. However, while access has been improved, other forms of exclusion have increased, a notable one being repetition at Ndovu primary school.

At Nyati primary school, FPE improved access but there too repetition increases the higher up the class gets. Quality is said to have been affected in both schools. Similar trends are witnessed at Pembe and in Macho primary schools, but less so at Mukia in Kajiado district.

It can also be said that rural schools have not seen serious changes in their enrollment patterns compared to urban schools. One factor that accounts for this is that rural schools have stable native population groups and in-transfers are fewer compared to mobile urban populations. Heterogeneity in pupils' household background explains some of the challenges in urban schools compared to rural schools where pupils tend to have similar profiles; nearly as similar as private academies such as Tumbo in terms of consistency. In-transfers are common in urban schools, but appear to be a major occurrence in our sample. Pupils move quite a bit between schools, with majority stating that they have at least changed school once. Some have transferred between schools several times. Some schools have easy entry and easy exit and this has increased following FPE.

Overage students was a major problem in all schools except Tumbo Academy. It was worse in Kajiado district compared to Kisii district. It is likely that being overage will lead to exclusion from secondary school and/or dropout, especially among girls. This is an exclusionary factor FPE has not helped solve.

It is also evident that household characteristics such as educational attainment of parents, household poverty/wealth, family size, influence exclusion and/or inclusion. At Tumbo Academy, exclusionary factors were less prevalent. However Tumbo Academy had pupils whose parents had university degrees and high education attainment levels. What is apparent is that FPE has helped to ease initial exclusion to access (first enrollment) but other forms of exclusion, notably repetition is increasing in and may be a serious cause of exclusion in the future. This may lead to declining enrollment. It also emerged that in slum contexts, such as Nyati primary school, the opportunity cost to schooling has been solved by FPE. On the balance, transfers and repetition will need to be monitored closely to assess the sustainability of FPE. Otherwise, by solving with one form of exclusion another may be exacerbated.

Clearly each school experienced FPE differently. It is necessary that these differences are monitored on a regular basis so that schools which don't appear to benefit from FPE can

be targeted. It is apparent based on the analysis presented here that there is need to start targeting schools in slums or informal settlements, mostly serving the urban poor.

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