

Policy Brief

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Southern and Eastern Africa Consortium
for Monitoring Educational Quality

Progress in Gender Equality in Education: Kenya

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Introduction

This policy brief deals with progress in 'gender equality' in primary education for the eight provinces in Kenya by seeking answers to the following specific questions:

- What were the changes in the **proportion of girls' enrolment** at the Standard 6 level for the eight provinces in Kenya between 2000 and 2007?
- What were the changes in the **size and the direction of the gender differences** in reading and mathematics scores for the eight provinces in Kenya between 2000 and 2007?
- What were the changes in **selected gender-related school environment information** between 2000 and 2007 that could be further investigated in order to improve gender equality in education for Kenya?

Answers to the above questions are expected to guide policy decisions regarding the gender-related interventions in education.

Kenya's Participation in SACMEQ

Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) is a network of 15 ministries of education (Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland,

Tanzania (Mainland), Tanzania (Zanzibar), Uganda, Zambia, and Zimbabwe).

SACMEQ's mission is to: (a) expand opportunities for educational planners to gain the technical skills required to monitor and evaluate the quality of their education systems; and (b) generate information that can be used by decision-makers to plan and improve the quality of education.

SACMEQ undertook three large-scale, cross-national studies of the quality of education: SACMEQ I (1995-1999, reading) with seven ministries; SACMEQ II (2000-2004, reading and mathematics) with 14 ministries; and SACMEQ III (2006-2010, reading, mathematics, and HIV and AIDS knowledge) with 15 ministries. Kenya participated in: SACMEQ I in 1997 (3,233 Standard 6 pupils in 185 primary schools); SACMEQ II in 2000 (3,299 Standard 6 pupils in 185 primary schools); and SACMEQ III in 2007 (4,436 Standard 6 pupils in 193 primary schools).

The Importance of Gender Equality in Education

The importance of gender equality in education within the process of international goal-setting was emphasized in the Education for All (EFA) Goals (UNESCO, 2000) and the Millennium Development Goals (MDG) (United Nations, 2006).

The gender equality issue in education has been a major concern in many countries, because of its link with health and nutrition, economic development, and civic responsibilities. For the purposes of this policy brief, the concept of ‘gender equality in education’ follows the UNESCO (2003) interpretation, which refers to the notion of boys and girls experiencing the same advantages or disadvantages in attending school, receiving teaching methods, curricula, and academic orientation, and producing equal learning achievements and subsequent life opportunities.

Gender-Related Policy in Kenya

The Government of Kenya considers gender balance and equality in education and training as a key contributor to the economic growth and sustainable development of Kenya. However, even after the introduction and implementation of the Free Primary Education (FPE) initiative in 2003, there were gender gaps in education. Gender disparities were evident in access, completion, transition, retention, and performance rates both nationally and provincially. To address these challenges, the Ministry of Education came up with a policy that sought to establish mechanisms to eliminate all gender disparities in education (Republic of Kenya, 2007a). The policy, which pays special attention to girls and women, emphasizes inclusiveness, affirmative action, mainstreaming, and partnerships to achieve gender balance and equality in education in Kenya.

Gender Balance in Standard 6 Participation

Figure 1 shows the proportions of girls enrolled at Standard 6 level for each province and Kenya as a whole in both 2002 and 2007. Throughout all the SACMEQ studies, the use of a ‘scientific’ sampling method with an internationally required level of sampling accuracy ensured that the proportion of girls

at the Standard 6 level in the sample reflected the entire Standard 6 target population.

The Standard 6 pupils of 2007 had come into the school system by the latest in 2000 (that is, before the implementation of FPE). In primary school in Kenya, gender parity had largely been achieved at the national level in 2007. As shown in Figure 1 at the national level, the proportion of Standard 6 girls was almost the same as that of boys, at around 50 percent in 2000 and 2007. There were, however, imbalances in the different provinces.

Girls were poorly represented in the North Eastern province, where they systematically comprised less than 30 percent of enrolments in Standard 6 for both 2000 and 2007. Coastal and Western provinces also had a female representation below 50 percent. It is likely that the reason for these disparities is due to prevailing cultural factors in these provinces. Three provinces in particular deserve mention, as they showed high female enrolments: Nairobi, Eastern, and Rift Valley. Nairobi moved from higher female enrolment rates in Standard 6 in 2000, towards a more balanced gender representation in 2007. Eastern too had a higher female than male enrolment rate in 2000 and this situation continued into 2007. In Rift Valley in 2000, there had been a gender balance in the enrolments, but by 2007, girls outnumbered boys. These two provinces have some of the richest agricultural regions in the country and child labour is common. Such labour, however, affects boys more than it does girls (Abagi & Odipo, 1997; Ayodo, 2011).

Gender Differences in Learning Achievements

While there was little progress in Kenya towards greater gender equality in enrolments between 2000 and 2007, policy-makers should be even more concerned about whether this pattern in the enrolment

trends was similar to that in the learning achievements.

Figures 2 and 3 illustrate the gender and time differences in the learning achievements in reading and mathematics by province. The standardized scores with a pupil mean of 500 and a standard deviation of 100 were established during SACMEQ II, based on the calibration of test items from the SACMEQ I and SACMEQ II studies. During SACMEQ III, use of the sub-set of these test items along with the Rasch-measurement approach permitted valid comparison of scores over time.

Reading

At the national level in Kenya, achievement levels for both boys and girls in Standard 6 in 2000 and 2007 were nearly equal.

At the provincial level, Central, Eastern, and Nyanza provinces displayed practically no gender differences in achievement trends by 2007. Different patterns of change were noticeable since 2000 in these three provinces. (a) In Central province, both boys and girls improved. (b) In Eastern, both girls and boys dropped in achievement levels (15 to 20 score points). (c) In Nyanza, there was a noticeable improvement by girls by nearly 20 score points. In contrast, girls performed less well than boys in Coastal, North Eastern, and Rift Valley provinces. North Eastern province was of particular concern, because the gap between girls and boys in 2007 was at least 80 points, which was the widest out of all the provinces. Interestingly, both girls and boys in North Eastern had improved tremendously since 2000; girls by about 20 score points and boys by over 30 points.

These results differed from those of the national Kenya Certificate of Primary Education examinations – which are administered at the end of Standard 8 – where girls have always outperformed boys in English (Kenya National Examinations Council, 2010). In general, the higher the grades, the better

girls tend to do than boys. This change in patterns requires further investigation to better understand what occurs during the final stages of primary school in Kenya.

Mathematics

At the national level, boys performed better than girls by some 25-score-point difference in 2007, which was similar to that of the year 2000.

At the provincial level, girls matched boys' achievements in mathematics in Nairobi, with a high score of about 610. In Western province, they too matched the boys, however, both girls and boys had dropped since 2000 to a low score of around 520 each in 2007. This was exceptional, since boys performed better than the girls in all the other remaining provinces. In Central and Nyanza, there was not much change in the size of the gender difference between the two years. In Coastal and Rift Valley, gender difference became larger in 2007 than they had been in 2000, with girls' achievements showing a drop, whilst boys improved. In Eastern province, boys dropped while girls remained constant. North Eastern province presented another disturbing gender gap in achievements. Here, boys registered the best results nationally, at about 630 points against the girls' 520, which were almost the lowest in the country. There were no effective programmes to close the gender gaps in mathematics achievements between 2000 and 2007.

Other Information through the 'Gender Lens'

The above sets of results illustrated two consistently unpleasant scenarios regarding gender equality in education. Firstly, Kenya appears to have not yet achieved gender balance in enrolments in certain provinces. Secondly, the learning dimension of gender equality had been overlooked (Saito, 2010). To understand the context of these results, a set of selected gender-related indicators has been provided

in Table 1. All the indicators shown in Table 1 should be interpreted in relation to the Standard 6 pupils.

Female Staff

Increasing the female staff has been seen as a strategy for girls' success, since female teachers and school heads are considered to be good role models as leaders. Among the SACMEQ countries, some had 'general' teachers who taught all subjects, while others had specialized subject teachers. In Kenya, pupils are assigned to teachers who specialise in particular subjects. As shown in Table 1, in both 2000 and 2007, the proportion of Standard 6 pupils taught reading by female teachers remained constant at 46 percent. Hence, female teachers of reading were slightly outnumbered by their male counterparts. More serious gender inequalities, however, emerged in the female representation among mathematics teachers, where only 27 percent of Standard 6 pupils were being taught by female teachers in 2007 for this important subject.

Regarding school heads, though still considerably lower than the number of males in this position, the percentage of Standard 6 pupils attending schools with a female school head rose from 9 percent in 2000 to 15 percent in 2007. This was in line with current government policy, which lays down that the Ministry of Education and other stakeholders need to continue with a gender-balanced approach in the appointment of school heads.

School Safety

Certain school resources are very critical in order to keep girls at school. Such resources, for example, include school safety (school fences) and sanitation measures (separate toilets for boys and girls). Table 1 illustrates that between 2000 and 2007, there was a small increase of six percentage points in the number of Standard 6 pupils attending schools with fences. This meant that 14 percent of Standard 6 pupils were at schools that had no fences. It is desirable that all primary schools be fenced in and that the gates to the

schools be controlled, so as to monitor access to the school compounds. The quality of the fencing itself is also an important factor to consider, as it can determine the effectiveness of fences as a safety measure.

Sanitation

In Table 1, the average numbers of pupils per toilet in 2000 and 2007 are shown separately, namely, boys per boys' toilet and girls per girls' toilet. About 2 percent of Standard 6 pupils in Kenya went to schools with no toilet at all in 2000 and 2007. The average numbers of girls and boys per toilet reflected only those schools with at least one gender-separated toilet. If the average number of pupils per toilet had decreased in 2007 compared to 2000, this would have indicated that the situation regarding the provision of toilets had improved over time. In Kenya, there was an increase in the number of girls (+7) and boys (+7) per toilet between 2000 and 2007. These figures are above the Ministry of Education's benchmark of 25 girls and 30 boys per toilet (Republic of Kenya, 2009). The construction of quality toilets is, therefore, an area requiring urgent action.

Summary of Results

This policy brief focused on gender equality issues regarding the participation and learning achievements (reading and mathematics) for Standard 6 pupils in Kenya. Additional information concerning female staff, security, and sanitary issues was also presented to understand the context.

The results indicated that:

- There were regional variations in all the main gender indicators. North Eastern province, and to a lesser extent Coastal, presented the highest gender differences in favour of boys in enrolments, reading, and mathematics achievements in 2007. The reason for this could be cultural factors that negate the efforts to

educate girls in these areas. This contrasted with the mainly urban Nairobi province, where gender indicators in 2007 were almost equal for both sexes (except in reading where girls outperformed boys). Home background and learning conditions in the city may be more conducive to full participation in education and success in learning for girls and boys.

- Nationally, girls did not do as well as boys in mathematics. This could be attributed in part to the relatively low proportion of female mathematics teachers.
- There was slight improvement in the proportion of female school heads, but this was still very small in comparison to the number of male school heads.
- While most schools were fenced, the provision of toilets for girls and boys was far the expected benchmark.

Policy Suggestions

To overcome some of the above-mentioned shortcomings, it is suggested that:

- The Ministry of Education and other education stakeholders should address gender inequalities in pupil enrolments particularly in North Eastern, Western, and Coastal provinces. The respective communities should be helped to modify or do away with cultural practices that keep girls away from school. In equal measure, there is a need to encourage boys to remain in school, especially in the rich agricultural areas of Eastern and Rift Valley provinces.
- Girls have consistently underachieved in mathematics. New innovative ways of teaching mathematics to girls and boys need to be developed and implemented. Tied to this is the need to train and employ more female mathematics teachers, who can be role models to female pupils. Furthermore, the effect of teacher gender on pupils' learning achievements might

be worthwhile investigating, as the deployment of more female mathematics teachers may help to boost girls' performance in mathematics.

- There should be greater gender balance in the appointment of female school heads. In keeping, therefore, with national policies requiring a gender balance in the appointment of managers, there is a need to both increase and then sustain the increase in the proportion of female head teachers. An increase in the number of female school heads is a good indicator of the implementation of gender-balancing policies. The Teachers' Service Commission (TSC) needs to strengthen the implementation of this policy, especially in rural primary schools.
- The Ministry of Education and education stakeholders need to ensure that schools are safe and have sufficient sanitary facilities, because a safe and hygienic learning environment is a way of retaining pupils in school. All primary schools should have an effective fence and a secured gate. Similarly, all schools should have the prescribed number of structurally sound toilets for girls and boys.

Conclusion

To attain the gender-related objectives within EFA, it is necessary to go beyond gender parity. The SACMEQ III Project's research results for Kenya indicated that not enough has been done to address gender inequalities in primary school enrolments, achievements, staffing, school safety, and sanitation. The Ministry of Education and other stakeholders should, therefore, prioritize the implementation of gender-related policies, as well as carry out the suggestions made in this brief. This will give impetus to the country's developmental aspirations as espoused in the Kenya Vision 2030 (Republic of Kenya, 2007b).

Authors

Paul M. Wasanga, Kenya National Examinations Council. (ceo@kneac.ac.ke)

Mukhtar A. Ogle, Kenya National Examinations Council. (aogle@kneac.ac.ke)

Richard M. Wambua, Kenya National Examinations Council. (rmwambua@kneac.ac.ke)

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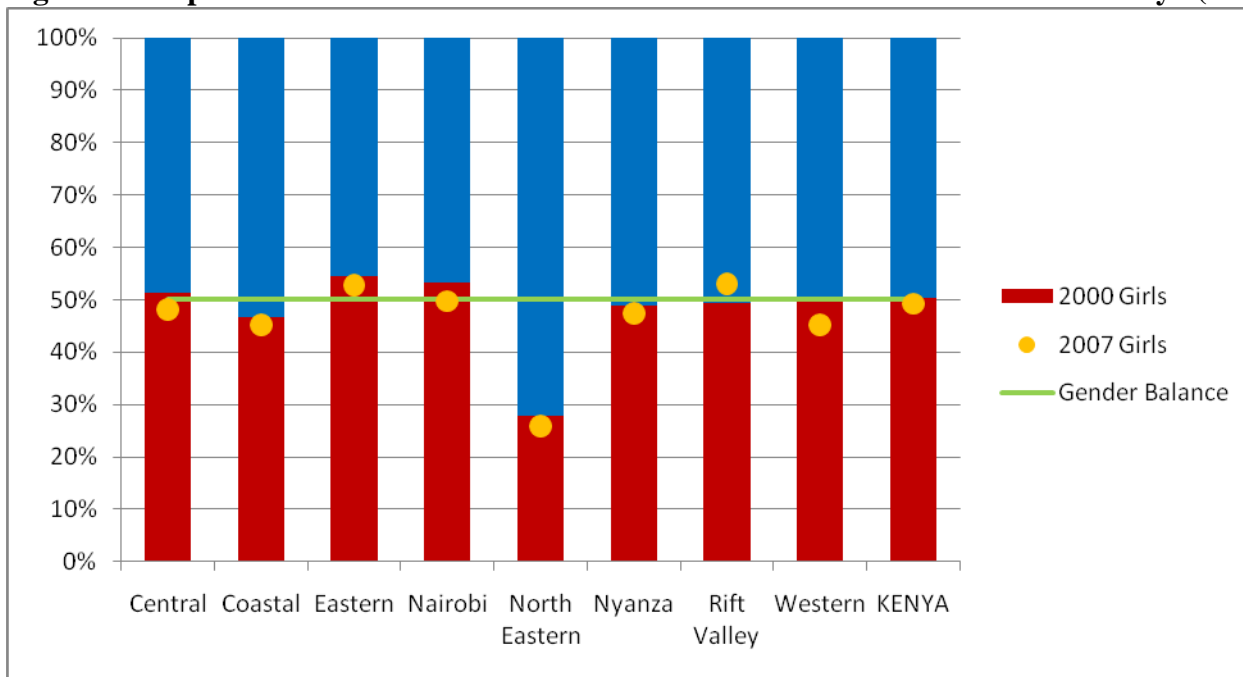
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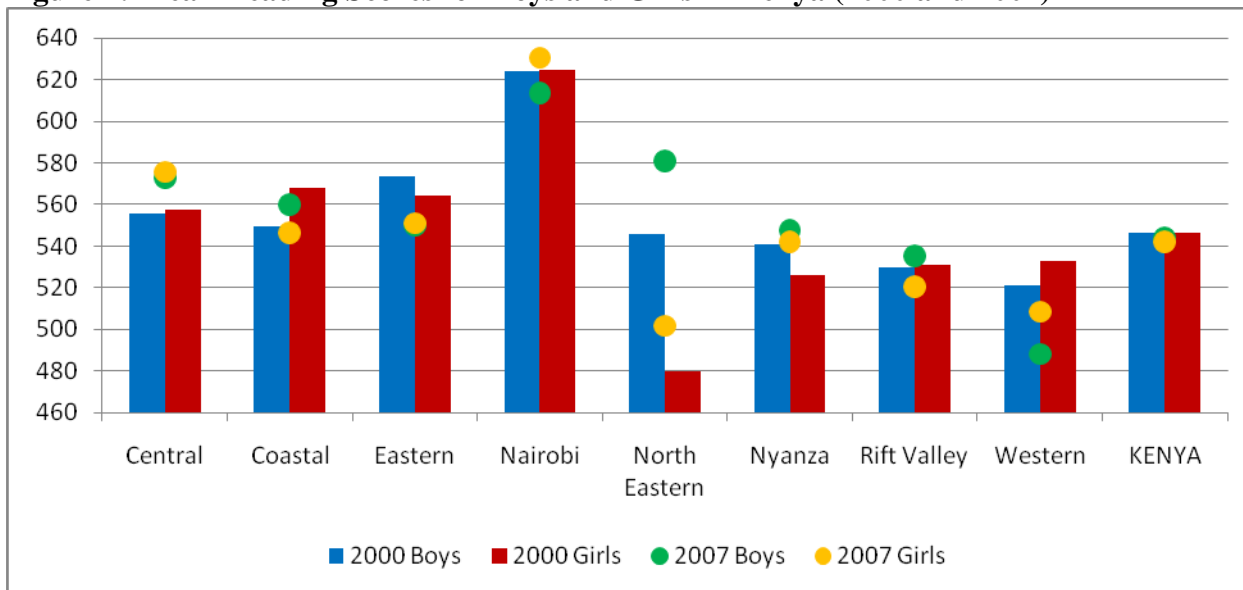
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Figure 1: Proportion of Standard 6 Girls out of Total Standard 6 Enrolments in Kenya (2000 and 2007)



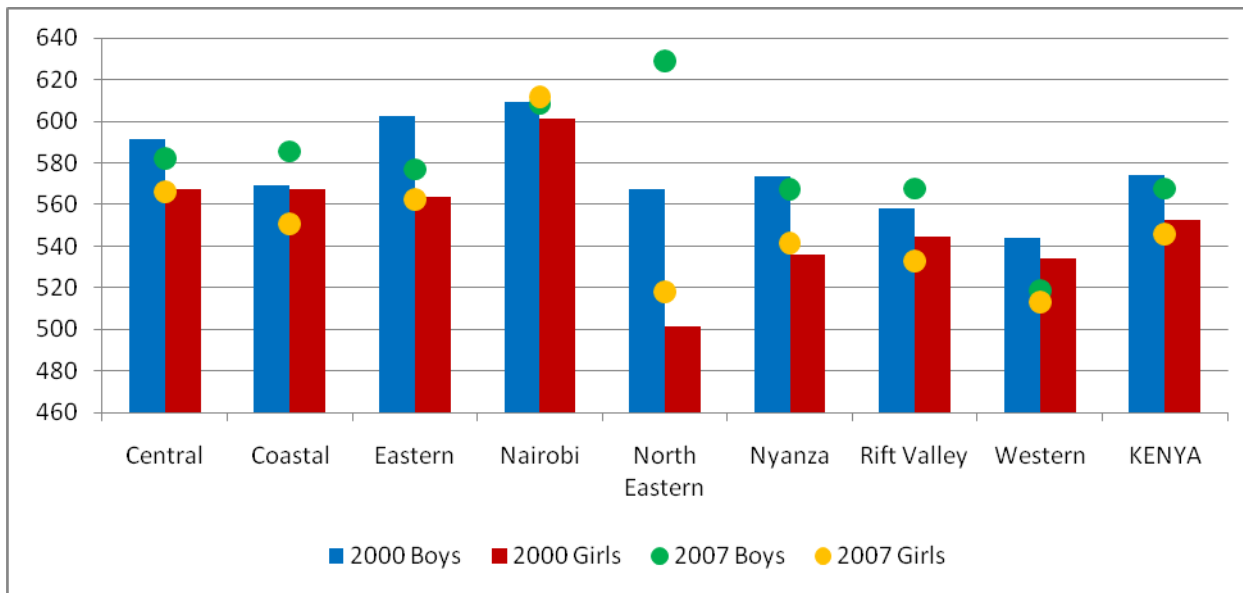
Source: SACMEQ Data Archive.

Figure 2: Mean Reading Scores for Boys and Girls in Kenya (2000 and 2007)



Source: SACMEQ Data Archive.

Figure 3: Mean Mathematics Scores for Boys and Girls in Kenya (2000 and 2007)



Source: SACMEQ Data Archive.

Table 1: Selected Information through ‘Gender Lens’ in Kenya (2000 and 2007)

Selected Indicators	2000	2007
Female Reading Teacher	46%	46%
Female Mathematics Teacher	24%	27%
Female School Head	9%	15%
Schools with Fences	80%	86%
# Boys per Boys' Toilet	49	56
# Girls per Girls' Toilet	45	52

Source: SACMEQ Data Archive.