

## ABSTRACT

In this paper, the author examines the characteristics of school heads and their schools in 15 African schools systems (Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar and Zimbabwe). The data for this study were collected in 2007 as part of a major project known as the SACMEQ III Project that sought to examine the quality of education offered in primary schools in these school systems as well as the conditions of schooling in these systems. (SACMEQ is an acronym for Southern and Eastern Africa Consortium for Monitoring Educational Quality).

The results revealed large variations in characteristics of school heads among these school systems in terms of their personal characteristics (age and gender), academic education, pre-service training, and special training on school management. Most SACMEQ school systems had large gender imbalances in school head positions in favour of males.

In addition, the results revealed considerable variations among these school systems in terms of conditions of school buildings, provision of teachers, provisions toilets, and pupils' and teachers' behavioural problems. The most common pupils' and teachers' behavioural problems in these school systems were lateness to school, absenteeism, and skipping of classes. School systems with high levels of teachers' problems tended to have higher levels of pupils' problems, and vice versa.

## KEYWORDS

Gender balance; Pupil behavioural problems; Pupil-teacher ratios; School heads; School location; School management; School toilets; Teacher behavioural problems.

Percentages of female school heads and female teachers


In most SACMEQ
school systems,
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gender equality
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## Introduction

In this paper, selected information about the characteristics of the school heads and their schools is presented. School heads are important components of a school system because they are the school managers and therefore they make decisions about the running of their school. These decisions are on issues ranging from assigning pupils to classes, to assigning teachers to classes and subjects, to purchase of school supplies, to repairing school buildings and facilities.

A school head is the top executive in a school, and is therefore responsible for supervising and evaluating all school staff (teaching and non-teaching) and making sure that all members of the school follow the rules. Heads are also the chief agents for enforcing national education policy within the school, and are responsible for ensuring that the official curriculum is followed and covered. As leaders, school heads are role models in schools, and their actions are noticed and interpreted by others as reflecting what is important (Lashway et al., 1997). They are also the link between the school and the general society. They represent the image of the school to the society.

It is worth noting that characteristics of school heads and schools have been linked to pupil achievement in some studies. For example, Hungi and Postlethwaite (2009), analysing data from Grade 5 pupils in Laos, reported that pupils in schools where the school heads were female were likely to achieve better results in reading and mathematics. Hungi and Thuku (2010), analysing data from the SACMEQ II study, reported that pupils in urban schools outperformed their counterparts in rural schools in some SACMEQ countries, especially Tanzania and Lesotho.

Information in this paper is presented in 12 short sections. The information presented in the first two sections focuses on school location and the age of the school heads, respectively. The third section focuses on school head sex and issues of gender balance in school managerial positions. Information about the school heads' levels of academic education is presented in the fourth section, while information about their pre-service training, special training on school management, and years of experience is presented in the fifth section. After this, the next five sections deal with information about the physical conditions of school buildings, pupil-teacher ratio, provision of toilets in schools, provision of free meals in schools, behavioural problems of pupils and teachers, and community contributions to school activities. The last two sections focus on school days lost, incidences of school inspection, and the actions taken by schools when a teacher is absent for a more than a week. Information about school resources is presented in a separate report.

It should be noted that information in this paper is presented with the pupil as the unit of analysis. For example, ' $x$ per cent of pupils were in schools located in rural areas' rather than ' $x$ per cent of schools were located in rural areas'. This should be taken to be the case even when it is not mentioned in the main text, tables, or figures.

## School location

School location is thought to be an important predictor of pupil achievement because the catchment populations of rural schools are on average of lower socio-economic status (SES) than
the catchment populations of urban schools. Besides, rural areas in most SACMEQ countries have no electricity, meaning that pupils in rural areas have poor sources of lighting for doing their studies and homework in the evenings compared with their counterparts in urban areas. Moreover, because of lack of electricity, schools in rural areas miss out on important teaching and learning resources that are electricity-dependent, such as computers, the Internet, video and audio systems.

In the SACMEQ studies, the school heads were asked about their perception of the location of their school. For this report, if the school head said their school was 'isolated' or 'rural', the school was classed as located in a rural area. Schools that heads said were 'in or near a small town' or 'in or near a large town or city' were classed as located in urban areas.

Data on school location were analysed, and the results are given in Table 1. As can be seen, slightly over half the Grade 6 pupils in SACMEQ II ( 55.4 per cent) and well over half the Grade 6 pupils in SACMEQ III ( 59.7 per cent) were in schools located in rural areas. Put in another way, less than half of the pupils were in urban schools. In most countries, the levels of pupils in rural schools in SACMEQ III followed closely the levels in SACMEQ II. The exceptions here were Zambia and Mozambique, where the levels of pupils in rural schools increased considerably.

For SACMEQ III, the Seychelles had the lowest level of pupils in rural schools ( 31.0 per cent) while Malawi had the highest level ( 76.2 per cent), followed by Uganda ( 72.7 per cent), Zimbabwe ( 71.1 per cent), and Swaziland ( 69.6 per cent).

## School head age

Data on the age of the school heads were analysed and the results are given in Table 1.
From Table 1 it can be seen that pupils in Mozambique had the youngest school heads in both studies (around 39 years) while pupils in Mauritius had the oldest school heads (around 52 to 56 years). It can also be seen that, in most countries, the average school head age increased between the two studies - especially in the Seychelles and Malawi, where the average age went up by around five years.

Further analyses of the distribution of the school head age among the countries that participated in the SACMEQ III study were undertaken, and the results are presented in the box plots in Figure 1. The box plots represent the age of school heads serving different percentages of the pupil population. The top and bottom bars of the box plot show the 90th and the 10th percentiles respectively, while the upper and lower edge of the box show the 75th and 25th percentiles respectively. The bar inside the box plot shows the 50th percentile, also called the median.

For example, for South Africa, the top bar corresponds to 54, indicating that 90 per cent of the pupils in South Africa had school heads who were 54 years old or younger. In other words, 10 per cent of Grade 6 pupils in South Africa had school heads who were more than 54 years old. The bottom bar corresponds to 40, implying that 10 per cent of the Grade 6 pupils in South Africa had school heads who were less than 40 years old. The lower and upper edges of the box correspond to 45 and 54 respectively, meaning that between 25 and 75 per cent of the pupils had
school heads who were between 45 and 54 years old. Finally, the bar inside the box corresponds to 50 , implying that half the pupil population were served by school heads who were younger than 50 , and the other half by school heads who were older than 50 .

Table 1 Means and percentages for school location, school head age, female school heads, and female teachers

| 2000 | Location (Rural school) |  | School head age |  | Female school head |  |  |  |  |  | Female teachers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rural | Urban |  | Overall |  |  |  |
|  | \% | SE |  |  | Mean | SE | \% | SE | \% | SE | \% | SE | \% | SE |
| Botswana | 49.1 | 3.92 | 50.6 | 0.54 | 44.9 | 5.70 | 61.6 | 5.37 | 53.4 | 3.95 | 81.7 | 0.82 |
| Kenya | 67.3 | 3.85 | 43.8 | 0.52 | 6.1 | 2.33 | 14.2 | 4.52 | 8.7 | 2.17 | 43.8 | 1.93 |
| Lesotho | 64.9 | 4.05 | 51.9 | 0.78 | 71.5 | 4.74 | 74.1 | 6.03 | 72.4 | 3.73 | 81.8 | 1.23 |
| Malawi | 67.0 | 4.33 | 40.9 | 0.49 | 13.9 | 4.40 | 16.5 | 6.21 | 14.7 | 3.60 | 42.6 | 2.75 |
| Mauritius | 48.3 | 3.77 | 52.8 | 0.29 | 22.0 | 4.41 | 44.9 | 6.01 | 33.8 | 3.87 | 56.8 | 1.12 |
| Mozambique | 25.5 | 3.37 | 38.6 | 0.54 | 16.7 | 6.24 | 15.0 | 3.39 | 15.4 | 2.98 | 29.5 | 1.81 |
| Namibia | 63.5 | 2.86 | 46.5 | 0.54 | 32.7 | 4.03 | 22.7 | 4.50 | 29.0 | 3.07 | 62.8 | 1.07 |
| Seychelles | 16.1 | 0.06 | 45.4 | 0.00 | 100.0 | 0.00 | 92.8 | 0.00 | 94.0 | 0.00 | 90.4 | 0.00 |
| South Africa | 43.8 | 4.12 | 46.0 | 0.60 | 22.9 | 5.13 | 19.2 | 4.54 | 20.8 | 3.40 | 71.5 | 1.02 |
| Swaziland | 70.5 | 3.86 | 48.0 | 0.53 | 38.6 | 5.45 | 43.7 | 7.62 | 40.1 | 4.42 | 75.5 | 0.95 |
| Tanzania | 71.4 | 4.12 | 41.6 | 0.48 | 14.9 | 3.52 | 27.3 | 7.21 | 18.4 | 3.25 | 48.0 | 2.47 |
| Uganda | 79.7 | 3.35 | 42.3 | 0.64 | 12.6 | 3.41 | 22.5 | 7.16 | 14.7 | 3.09 | 34.0 | 1.69 |
| Zambia | 47.9 | 4.56 | 47.8 | 0.40 | 8.3 | 3.06 | 29.5 | 5.92 | 19.3 | 3.34 | 46.9 | 2.71 |
| Zanzibar | 58.9 | 0.32 | 46.8 | 0.02 | 2.2 | 0.01 | 44.4 | 0.56 | 19.5 | 0.34 | 59.0 | 0.18 |
| Zimbabwe | x $\times$ | x $\times$ | $\times x$ | $\times \times$ | $\times \times$ | x× | x $\times$ | x $\times$ | $\times \times$ | $\times \times$ | x $\times$ | x $\times$ |
| SACMEQ II | 55.4 | 0.94 | 46.0 | 0.14 | 25.5 | 1.21 | 41.4 | 1.43 | 32.6 | 0.85 | 59.0 | 0.48 |


| 2007 | Location (Rural school) |  | School head age |  | Female school head |  |  |  |  |  | Female teachers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rural | Urban |  | Overall |  |  |  |
|  | \% | SE |  |  | Mean | SE | \% | SE | \% | SE | \% | SE | \% | SE |
| Botswana | 48.4 | 3.99 | 51.4 | 0.47 | 66.3 | 5.49 | 62.6 | 5.46 | 64.3 | 3.87 | 77.9 | 0.93 |
| Kenya | 65.0 | 3.93 | 45.4 | 0.46 | 11.9 | 3.22 | 20.0 | 5.33 | 14.7 | 2.81 | 47.5 | 1.63 |
| Lesotho | 66.4 | 3.94 | 51.0 | 0.70 | 76.9 | 4.11 | 84.3 | 5.49 | 79.4 | 3.29 | 80.2 | 1.18 |
| Malawi | 76.2 | 3.82 | 45.1 | 0.45 | 5.4 | 2.20 | 36.7 | 8.78 | 12.8 | 2.89 | 40.8 | 2.59 |
| Mauritius | 51.8 | 4.18 | 56.0 | 0.25 | 32.1 | 5.26 | 48.7 | 6.30 | 40.1 | 4.09 | 63.1 | 1.11 |
| Mozambique | 36.7 | 3.65 | 40.9 | 0.56 | 9.7 | 4.30 | 29.8 | 4.65 | 22.4 | 3.39 | 41.8 | 1.42 |
| Namibia | 60.8 | 2.88 | 47.0 | 0.51 | 39.0 | 4.32 | 45.7 | 5.16 | 41.6 | 3.32 | 65.6 | 0.95 |
| Seychelles | 31.0 | 0.11 | 49.8 | 0.02 | 78.7 | 0.07 | 84.7 | 0.05 | 82.8 | 0.04 | 85.7 | 0.03 |
| South Africa | 50.0 | 2.60 | 49.4 | 0.39 | 40.8 | 4.05 | 28.5 | 3.62 | 34.7 | 2.74 | 74.7 | 0.69 |
| Swaziland | 69.6 | 3.59 | 49.8 | 0.48 | 32.5 | 4.27 | 38.0 | 6.95 | 34.2 | 3.65 | 74.8 | 0.90 |
| Tanzania | 68.3 | 3.76 | 41.7 | 0.54 | 14.8 | 3.19 | 25.0 | 6.17 | 18.0 | 2.95 | 48.8 | 2.17 |
| Uganda | 72.7 | 2.94 | 44.5 | 0.49 | 17.4 | 2.97 | 36.0 | 6.27 | 22.5 | 2.83 | 38.7 | 1.21 |
| Zambia | 64.7 | 3.95 | 48.9 | 0.47 | 22.4 | 4.57 | 48.0 | 7.80 | 31.5 | 4.23 | 49.1 | 2.60 |
| Zanzibar | 63.0 | 2.95 | 50.5 | 0.34 | 9.3 | 2.37 | 41.4 | 4.15 | 21.2 | 2.31 | 66.2 | 1.69 |
| Zimbabwe | 71.1 | 3.91 | 48.0 | 0.70 | 16.1 | 3.98 | 51.6 | 8.21 | 27.2 | 4.03 | 55.1 | 1.76 |
| SACMEQ III | 59.7 | 0.87 | 48.0 | 0.14 | 29.4 | 1.08 | 47.3 | 1.42 | 36.6 | 0.85 | 60.7 | 0.45 |

Thus, from Figure 1 it can be seen that in most countries, over half the pupil population had a school head aged over 50 . This means that the authorities in those countries have to start planning for the replacement of these teachers because they are approaching retirement age,
which is around 55 to 60 years in most SACMEQ countries. This is especially so for Mauritius, where over 90 per cent of the pupils had school heads who were over 50 years old.


Figure 1 Distribution of school head age (SACMEQ III)

## Female school heads and gender balance

In a hypothetical school system that had perfect levels of gender equity (with respect to staffing and promotion policies), about 50 per cent of the school heads and 50 per cent of the teachers could be expected to be female. However, some educationists might argue that this form of equal representation is undesirable in primary schools. For example, Zhang et al. (2008) contend that one would expect more female teachers at the primary school level because in many countries female teachers (perhaps because of their motherly connection with young children) are often reported to produce better pupil educational outcomes.

Data on the sex of the school heads and teachers were analysed, and the results are presented in Table 1. For school head sex, it can be seen from these results that around one-third of the pupils in both SACMEQ II (32.6\%) and SACMEQ (36.6\%) were in schools with female heads. However, there were large variations in the percentage of female school heads between countries. For example, in Malawi and Kenya less than 20 per cent of the pupils in the two studies had female school heads, while in the Seychelles and Lesotho over 70 per cent of the pupils in both studies had female school heads. Between the two studies, the percentages of pupils with female school heads remained more or less the same in most countries, but in Botswana, Kenya, Mozambique, Namibia, and Uganda the percentage increased markedly.

Within individual countries, there were some differences in percentages of pupils with female school heads between rural and urban areas. As can be seen from Table 1, in most countries there were considerably more pupils with female school heads in urban than in rural
areas. Nevertheless, the differences in percentages of pupils with female school heads in urban and rural areas were not much in Botswana, Lesotho, Namibia, and Swaziland.

For sex of the teachers, it can be seen from the results in Table 1 that about 60 per cent of the pupils had female teachers in both SACMEQ II and SACMEQ III. Because school heads are drawn from the existing teacher population, the gender balance for teachers could be expected to be approximately the same as the gender balance for school heads, but this is not normally the case because education authorities prefer male heads in remote rural areas (Zhang et al., 2008). If the preferences for male heads in remote areas are counterbalanced with roughly similar preferences for female heads in urban areas, then at the national level there would be no significant gender imbalances between head positions and the general population of teachers.

However, for SACMEQ III, only in two countries (Lesotho and Seychelles) were the percentages of female school heads approximately the same as the percentages of female teachers, which suggests a possible bias in the allocation of school managerial positions in favour of male teachers in the other SACMEQ countries (see Figure 2). In Zanzibar, 66.2 per cent of the pupils had female teachers yet only 21.2 per cent of the pupils had female school heads. Similarly, in Kenya, 47.5 per cent of the pupils were taught by female teachers and a mere 14.7 per cent had female school heads.

Thus, in most SACMEQ school systems, it is clear that there are gender equality problems in school managerial positions. This outcome has implications at two levels.

First, female teachers may consider that there are barriers to their professional advancement, and this could be harmful to their morale.


In most SACMEQ school systems, the percentage of female teachers greatly exceeded the percentage of female school heads.

Figure 2 Percentages of female school heads and female teachers (SACMEQ III)

Second, these gender inequities could send the wrong signal to pupils (both boys and girls) - that female teachers are incapable of being leaders. The way forward in this area is to open up informed dialogue among the key stakeholders in the process of managing the career progression of teachers (staffing divisions, inspectorates, teacher unions, and so on). This dialogue should be based on the kinds of research data that have been summarized in this article, and should be focused on setting agreed and feasible targets for greater gender equity in school managerial positions.

## School head highest level of education

The percentages of pupils in schools with school heads of different levels of education are presented in Table 2. The numbers in green in the second panel of Table 2 indicate situations where desirable trends were recorded between 2000 and 2007. Reductions in the levels of 'primary', 'junior secondary', 'senior secondary' and 'A-level' were considered desirable trends, while an increase in the percentage educated to university level was considered desirable.

As can be seen from the results in Table 2, the most common school head education level across these countries was senior secondary education, followed by A-level education, but this varied greatly between countries. For SACMEQ III, for example, over 60 per cent of the pupils in the Seychelles, Zimbabwe, and South Africa had school heads with university education, while none of the pupils in Malawi and Tanzania had school heads educated to this level. About half or more of the pupils in Kenya, Malawi, Mauritius, Mozambique, Tanzania. and Zambia had heads with senior secondary education. On the other hand, over three-quarters of the pupils in Swaziland and about half the pupils in Zanzibar had heads with A-level education.

The changes in percentages of school heads with various education levels between SACMEQ II and SACMEQ III are displayed in Figure 3(a) to (e) for all the countries except the Seychelles. The changes for the Seychelles are shown separately in Figure 3(f). Zimbabwe is not represented in this plot because it did not take part in the SACMEQ II study.

In general, levels of school head education improved. For example, for Botswana the percentages for primary and senior secondary education decreased noticeably, while the percentages for A-level and university education increased considerably, which means that the levels of education of the school heads in Botswana improved generally. The levels of university education increased extensively in most countries except in Zambia (where the level dropped noticeably), Mozambique, Malawi, and Tanzania (where the levels did not change much).

Table 2 Academic education of school heads

| 2000 | Primary |  | Junior sec. |  | Senior sec. |  | A-level |  | University |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE |
| Botswana | 28.0 | 3.62 | 48.2 | 3.96 | 17.0 | 2.98 | 2.6 | 1.21 | 4.1 | 1.48 |
| Kenya | 0.0 | 0.00 | 1.1 | 0.81 | 71.0 | 3.74 | 27.5 | 3.69 | 0.3 | 0.23 |
| Lesotho | 41.2 | 4.20 | 9.5 | 2.20 | 11.8 | 2.59 | 22.8 | 3.54 | 14.9 | 3.00 |
| Malawi | 0.0 | 0.00 | 38.1 | 4.43 | 61.0 | 4.46 | 0.9 | 0.93 | 0.0 | 0.00 |
| Mauritius | 0.6 | 0.59 | 0.7 | 0.69 | 53.7 | 4.18 | 40.4 | 4.13 | 4.7 | 1.74 |
| Mozambique | 4.1 | 1.80 | 11.7 | 2.76 | 63.4 | 3.87 | 7.5 | 2.55 | 13.3 | 2.28 |
| Namibia | 14.0 | 2.32 | 16.9 | 2.54 | 37.6 | 3.25 | 11.3 | 1.98 | 20.1 | 2.36 |
| Seychelles | 0.0 | 0.00 | 4.6 | 0.00 | 33.6 | 0.02 | 52.1 | 0.04 | 9.7 | 0.06 |
| South Africa | 7.7 | 2.01 | 4.4 | 1.57 | 15.6 | 2.99 | 23.1 | 3.62 | 49.2 | 4.41 |
| Swaziland | 6.1 | 2.05 | 8.4 | 2.12 | 13.9 | 2.83 | 66.4 | 3.95 | 5.2 | 1.79 |
| Tanzania | 8.6 | 2.28 | 1.0 | 0.71 | 81.0 | 3.28 | 9.4 | 2.51 | 0.0 | 0.00 |
| Uganda | 1.9 | 1.00 | 2.9 | 1.39 | 44.7 | 4.53 | 40.4 | 4.40 | 10.1 | 2.92 |
| Zambia | 0.0 | 0.00 | 17.3 | 3.16 | 62.5 | 4.33 | 12.9 | 2.75 | 7.3 | 2.21 |
| Zanzibar | 1.6 | 0.01 | 5.7 | 0.16 | 38.8 | 0.35 | 53.2 | 0.33 | 0.7 | 0.00 |
| Zimbabwe | x $\times$ | x $\times$ | x $\times$ | x $\times$ | x $\times$ | x $\times$ | x $\times$ | $\times \times$ | x $\times$ | x $\times$ |
| SACMEQ II | 8.2 | 0.57 | 12.2 | 0.64 | 43.2 | 0.93 | 26.6 | 0.90 | 9.9 | 0.59 |


| 2007 | Primary |  | Junior sec. |  | Senior sec. |  | A-level |  | University |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\%$ | SE | $\%$ | SE | $\%$ | SE | $\%$ | SE | $\%$ | SE |
| Botswana | 11.8 | 2.67 | 45.1 | 4.00 | 10.7 | 2.41 | 9.4 | 2.41 | 22.9 | 3.43 |
| Kenya | 0.7 | 0.66 | 0.5 | 0.46 | 67.6 | 3.72 | 26.1 | 3.49 | 5.1 | 1.60 |
| Lesotho | 25.8 | 3.67 | 5.4 | 1.72 | 6.2 | 2.16 | 31.6 | 3.67 | 30.9 | 4.10 |
| Malawi | 0.0 | 0.00 | 26.8 | 4.02 | 72.5 | 4.05 | 0.7 | 0.66 | 0.0 | 0.00 |
| Mauritius | 1.7 | 1.20 | 0.6 | 0.57 | 52.5 | 4.22 | 36.6 | 4.11 | 8.7 | 2.35 |
| Mozambique | 1.7 | 0.80 | 19.5 | 3.20 | 55.8 | 3.96 | 13.0 | 2.80 | 10.0 | 2.30 |
| Namibia | 14.2 | 2.39 | 5.0 | 1.43 | 34.0 | 3.13 | 13.0 | 2.14 | 33.8 | 2.98 |
| Seychelles | 0.0 | 0.00 | 0.0 | 0.00 | 6.2 | 0.19 | 23.3 | 0.10 | 70.5 | 0.17 |
| South Africa | 9.4 | 1.75 | 1.7 | 0.69 | 8.3 | 1.63 | 16.8 | 2.07 | 63.8 | 2.75 |
| Swaziland | 0.5 | 0.53 | 1.9 | 1.01 | 5.5 | 1.73 | 76.3 | 3.28 | 15.8 | 2.83 |
| Tanzania | 0.8 | 0.62 | 23.1 | 3.27 | 61.0 | 3.85 | 15.1 | 3.06 | 0.0 | 0.00 |
| Uganda | 4.4 | 1.34 | 1.8 | 0.84 | 34.2 | 3.12 | 33.3 | 3.20 | 26.2 | 2.97 |
| Zambia | 2.6 | 1.31 | 3.8 | 1.73 | 67.6 | 4.11 | 23.3 | 3.67 | 2.7 | 1.63 |
| Zanzibar | 0.8 | 0.79 | 0.0 | 0.00 | 46.4 | 3.34 | 49.2 | 3.33 | 3.6 | 0.23 |
| Zimbabwe | 1.7 | 0.99 | 0.6 | 0.56 | 25.5 | 4.06 | 8.4 | 2.57 | 63.7 | 4.47 |
| SACMEQ III | 5.1 | 0.42 | 9.2 | 0.56 | 36.8 | 0.88 | $\mathbf{2 5 . 3}$ | 0.77 | $\mathbf{2 3 . 7}$ | 0.71 |

NOTE: Numbers presented in green indicate that a desirable trend was recorded between 2000 and 2007.

## School head training, experience, and teaching hours per week

In the SACMEQ studies, school heads were asked about the number of years of pre-service teacher training they had received. They were also asked about the number of years they had been teaching altogether, the number of years they had been a school head, the number of lessons they taught each week and the duration of these lessons, and whether or not they had received specialized training in school management after they became a school head. Data on school heads' responses to these questions were analysed, and the results are given in Table 3. The numbers in green in the second panel of Table 3 indicate situations where desirable trends were recorded between 2000 and 2007.


Figure 3 Changes in percentage of pupils in schools with school heads of different education levels of between 2000 and 2007

Table 3 School heads' pre-service training, management courses, experience, and teaching hours per week

|  | Pre-service training (years) |  | Has attended a management course |  | Experience |  |  |  | Teaching (hrs/wk) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Teaching (years) | School head (years) |  |  |  |
|  | Mean | SE |  |  | \% | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 2.4 | 0.05 | 53.6 | 3.98 | 26.0 | 0.46 | 11.4 | 0.67 | 2.9 | 0.41 |
| Kenya | 2.1 | 0.04 | 100.0 | 0.00 | 20.2 | 0.55 | 7.3 | 0.51 | 15.7 | 0.45 |
| Lesotho | 3.4 | 0.07 | 69.2 | 3.84 | 25.6 | 0.88 | 13.3 | 0.79 | 18.0 | 0.78 |
| Malawi | 1.9 | 0.06 | 97.8 | 2.13 | 15.5 | 0.62 | 7.1 | 0.50 | 10.2 | 0.73 |
| Mauritius | 2.4 | 0.07 | 100.0 | 0.00 | 31.1 | 0.34 | 3.6 | 0.18 | 2.2 | 0.24 |
| Mozambique | 2.6 | 0.09 | 43.2 | 3.95 | 18.0 | 0.55 | 7.1 | 0.43 | 5.8 | 0.54 |
| Namibia | 2.9 | 0.06 | 78.2 | 2.79 | 22.4 | 0.54 | 13.0 | 0.58 | 13.6 | 0.46 |
| Seychelles | 3.0 | 0.00 | 71.8 | 0.05 | 28.2 | 0.00 | 8.7 | 0.00 | 2.2 | 0.00 |
| South Africa | 3.3 | 0.07 | 71.9 | 3.84 | 22.8 | 0.69 | 9.7 | 0.57 | 8.0 | 0.59 |
| Swaziland | 2.4 | 0.08 | 97.4 | 1.20 | 22.6 | 0.58 | 11.8 | 0.62 | 7.1 | 0.64 |
| Tanzania | 2.0 | 0.05 | 74.1 | 3.55 | 17.6 | 0.55 | 7.9 | 0.59 | 14.2 | 0.65 |
| Uganda | 3.4 | 0.08 | 80.1 | 3.59 | 18.7 | 0.66 | 10.6 | 0.68 | 8.4 | 0.72 |
| Zambia | 2.5 | 0.10 | 82.7 | 3.09 | 24.1 | 0.57 | 7.2 | 0.48 | 12.5 | 0.99 |
| Zanzibar | 2.4 | 0.01 | 80.2 | 0.30 | 25.4 | 0.03 | 7.6 | 0.03 | 10.1 | 0.02 |
| Zimbabwe | x $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | x $\times$ | $\times \times$ | x $\times$ | x $\times$ | x $\times$ | $\times \times$ |
| SACMEQ II | 2.6 | 0.02 | 78.7 | 0.76 | 22.7 | 0.16 | 9.0 | 0.15 | 9.4 | 0.17 |


|  | Pre-service training (years) |  | Has attended a management course |  | Experience |  |  |  | Teaching (hrs/wk) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Teaching (years) | School head (years) |  |  |  |
|  | Mean | SE |  |  | \% | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 2.7 | 0.08 | 68.9 | 3.80 | 27.4 | 0.44 | 9.0 | 0.60 | 1.3 | 0.22 |
| Kenya | 2.1 | 0.03 | 81.5 | 3.20 | 21.3 | 0.47 | 7.6 | 0.43 | 14.5 | 0.39 |
| Lesotho | 3.3 | 0.10 | 70.6 | 3.76 | 23.3 | 0.82 | 10.7 | 0.65 | 11.7 | 0.77 |
| Malawi | 2.0 | 0.05 | 57.9 | 4.47 | 20.0 | 0.45 | 8.7 | 0.47 | 14.0 | 0.87 |
| Mauritius | 2.1 | 0.06 | 75.5 | 3.70 | 33.9 | 0.37 | 4.6 | 0.30 | 1.6 | 0.32 |
| Mozambique | 2.5 | 0.08 | 70.9 | 3.59 | 19.1 | 0.63 | 8.0 | 0.55 | 7.1 | 0.55 |
| Namibia | 3.3 | 0.05 | 62.9 | 3.20 | 22.9 | 0.57 | 9.9 | 0.57 | 11.6 | 0.38 |
| Seychelles | 3.1 | 0.00 | 78.3 | 0.18 | 30.9 | 0.02 | 8.8 | 0.02 | 1.8 | 0.01 |
| South Africa | 3.5 | 0.04 | 72.7 | 2.58 | 25.3 | 0.40 | 10.5 | 0.45 | 7.5 | 0.36 |
| Swaziland | 2.5 | 0.06 | 94.1 | 1.81 | 24.5 | 0.52 | 12.3 | 0.67 | 3.8 | 0.29 |
| Tanzania | 2.0 | 0.05 | 39.3 | 3.88 | 17.4 | 0.59 | 7.2 | 0.46 | 12.8 | 0.52 |
| Uganda | 3.4 | 0.06 | 75.4 | 2.92 | 20.2 | 0.48 | 9.9 | 0.44 | 6.6 | 0.34 |
| Zambia | 2.4 | 0.06 | 57.3 | 4.34 | 23.8 | 0.51 | 6.5 | 0.44 | 10.3 | 0.85 |
| Zanzibar | 2.2 | 0.05 | 61.0 | 3.26 | 28.9 | 0.37 | 8.5 | 0.40 | 7.1 | 0.31 |
| Zimbabwe | 3.5 | 0.05 | 62.0 | 4.54 | 23.6 | 0.80 | 10.8 | 0.78 | 10.3 | 0.80 |
| SACMEQ III | 2.7 | 0.02 | 68.7 | 0.90 | 24.2 | 0.15 | 8.9 | 0.13 | 8.1 | 0.16 |

NOTE: Numbers in green indicate that a desirable trend was recorded between 2000 and 2007 but this colouring scheme was not employed for school head teaching hours per week.

## Pre-service training

School heads in SACMEQ II and SACMEQ III had received on average 2.6 years and 2.7 years of pre-service training respectively. For SACMEQ III, the average varied from 2 years in Malawi to 3.5 years in South Africa and Zimbabwe. The average remained roughly the same between the SACMEQ II and SACMEQ III studies in most countries. However, the average number of years of pre-service training received by heads in Mauritius and Zanzibar decreased markedly, while in Botswana and Namibia the averages increased notably.

## Special training on school management

The percentages of school heads who reported that they had received specialized training in school management after they became school heads are given in Table 3.

For SACMEQ III, these percentages ranged from 39.3 in Tanzania to 94.1 in Swaziland. Apart from Tanzania, over half the pupils in all the other countries had school heads who reported that they had received specialized training in school management. Nevertheless, in most countries, the levels of management training generally declined between SACMEQ II and SACMEQ III. In Malawi, for example, the level went down by around 40 per cent, and this should be worrying for the authorities there. Other countries that recorded troubling declines in levels of management training were Tanzania ( -34.8 per cent), Zambia ( -25.4 per cent), and Mauritius ( -24.5 per cent). Only two countries recorded notable improvement in the levels of school head management training, namely Mozambique ( 27.7 per cent) and Botswana ( 15.3 per cent).

## School head experience

The average number of years of experience obtained by the school heads as teachers and as school heads are presented in Table 3.

For SACMEQ III, the average number of years as a school head varied from just under five years in Mauritius (4.6) to over ten years in South Africa (10.5), Lesotho (10.7), Zimbabwe (10.8), and slightly over 12 years in Swaziland (12.3). On the other hand, the average number of years as a teacher varied from less than 20 years in Tanzania (17.4) and Mozambique (19.1) to over 30 years in the Seychelles (30.9) and Mauritius (33.9). Thus Swaziland had school heads who were the most experienced as school managers while Mauritius had school heads who were the most experienced in terms of years of teaching.

Between the SACMEQ II and SACMEQ III studies, the average numbers of years of headship experience for school heads remained almost the same in most countries, but in Mauritius and Malawi the averages increased considerably, and in Botswana, Namibia, and Lesotho they went down noticeably. For experience as a teacher, the averages increased in most countries, except for Lesotho (where the average decreased markedly) and Tanzania and Zambia, where the averages remained more or less the same.

## School head teaching hours per week

The average numbers of hours per week spent by school heads teaching are summarized in Table 3 and depicted in Figure 4.


Figure 4 School heads' teaching hours per week

In general, school heads in rural areas taught more hours per week than school heads in urban areas.

It can be seen from the results in Table 3 that the average pupil in SACMEQ II had a school head who spent 9.4 hours per week teaching, and the average pupil in SACMEQ III had a school head who taught 8.1 hours per week. For SACMEQ III, the school heads who taught the fewest hours per week were in Botswana (1.3) followed by those in Mauritius (1.6) and the Seychelles (1.8), while the school heads who taught most hours per week were in Kenya (14.5), followed by the Malawi (14.0) and Tanzania (12.8).

It can further be seen from Figure 4 that in general, school heads in rural areas taught more hours per week than school heads in urban areas. In general, the rural school heads taught five hours more than their urban counterparts, but this varied greatly between countries. For example, in Zambia and Malawi, the rural school heads taught over 10 hours more than their urban counterparts, in Mauritius, Swaziland, and Uganda, the school heads in rural and urban schools taught roughly the same hours per week, while in the Seychelles the rural school heads taught around one hour less than their urban colleagues.

Generally, the teaching hours per week for school heads decreased between SACMEQ II and SACMEQ III. Nevertheless, in Mozambique and Malawi the hours went up considerably. The changes in teaching hours in Mauritius, the Seychelles, and South Africa were trivial.

## Physical condition of the school builldings

In SACMEQ III studies, school heads were asked about their perception of the condition of their school buildings. For this paper, if a school head reported that 'the school needs complete rebuilding' or 'some classrooms need major repairs', the school was rated as in 'poor condition'. On the other hand, if the school head reported that 'most or some classrooms need minor repairs' or 'school is good condition', the school was rated as in 'good condition'. This is the same classification used in the World Education Indicators (WEI) study (Zhang et al., 2008).

Data on school heads' perceptions of building condition were analysed, and the results are given in Table 4.

In two school systems (Lesotho and Uganda), the schools were perceived to be in much better condition in SACMEQ III than in SACMEQ II. On the other hand, schools in four school systems (Kenya, Mozambique, Tanzania, and Zambia) were perceived to be in a worse condition in SACMEQ III than in SACMEQ II. The disparities between SACMEQ III and SACMEQ II in terms of building condition seemed large in Kenya and Mozambique (where conditions were deemed to have greatly deteriorated) and in Lesotho (where conditions were deemed to have considerably improved).

Table 4 Percentages of pupils in schools perceived to be in good building condition

|  | SACMEQ II (2000) |  |  |  |  |  | SACMEQ III (2007) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural |  | Urban |  | Overall |  | Rural |  | Urban |  | Overall |  |
|  | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE |
| Botswana | 58.7 | 5.72 | 63.7 | 5.28 | 61.3 | 3.88 | 65.8 | 5.66 | 68.2 | 5.20 | 67.0 | 3.82 |
| Kenya | 62.5 | 5.02 | 76.8 | 6.08 | 67.2 | 3.93 | 33.8 | 4.75 | 51.5 | 7.02 | 40.0 | 3.94 |
| Lesotho | 31.7 | 5.05 | 35.0 | 6.68 | 32.8 | 4.01 | 55.3 | 4.98 | 42.4 | 7.48 | 51.0 | 4.18 |
| Malawi | 40.5 | 5.45 | 44.5 | 8.10 | 41.8 | 4.51 | 41.5 | 5.07 | 58.7 | 9.11 | 45.6 | 4.48 |
| Mauritius | 81.1 | 4.65 | 83.7 | 4.74 | 82.4 | 3.33 | 85.5 | 4.06 | 77.0 | 5.18 | 81.4 | 3.27 |
| Mozambique | 50.2 | 7.58 | 58.8 | 4.48 | 56.6 | 3.87 | 37.4 | 6.29 | 47.7 | 5.01 | 43.9 | 3.91 |
| Namibia | 46.0 | 4.35 | 61.3 | 4.89 | 51.6 | 3.27 | 49.7 | 4.40 | 62.1 | 5.05 | 54.6 | 3.31 |
| Seychelles | 76.3 | 0.32 | 59.4 | 0.00 | 62.1 | 0.04 | 84.0 | 0.06 | 74.2 | 0.08 | 77.2 | 0.06 |
| South Africa | 32.1 | 5.77 | 73.4 | 5.18 | 55.4 | 4.27 | 45.1 | 4.12 | 71.0 | 3.52 | 58.0 | 2.77 |
| Swaziland | 50.2 | 5.35 | 54.9 | 7.71 | 51.6 | 4.37 | 49.9 | 4.68 | 57.5 | 7.24 | 52.2 | 3.93 |
| Tanzania | 45.7 | 4.60 | 58.9 | 8.65 | 49.5 | 4.16 | 40.5 | 4.56 | 43.3 | 7.23 | 41.4 | 3.86 |
| Uganda | 17.4 | 4.06 | 37.9 | 8.23 | 21.6 | 3.63 | 24.4 | 3.35 | 38.8 | 6.26 | 28.4 | 2.98 |
| Zambia | 34.4 | 5.10 | 62.8 | 8.13 | 49.2 | 4.59 | 31.1 | 5.00 | 48.3 | 7.66 | 37.2 | 4.29 |
| Zanzibar | 49.8 | 0.29 | 57.5 | 0.58 | 53.0 | 0.33 | 57.1 | 4.70 | 54.2 | 4.54 | 56.0 | 3.40 |
| Zimbabwe | xx | $\times \times$ | x $\times$ | $\times \times$ | x $\times$ | $\times \times$ | 37.6 | 5.50 | 84.3 | 5.86 | 52.1 | 4.70 |
| SACMEQ | 45.7 | 1.34 | 61.0 | 1.50 | 52.5 | 1.01 | 47.4 | 1.28 | 60.1 | 1.53 | 52.5 | 0.99 |

NOTE: Numbers in green indicate that building condition improved between 2000 and 2007.

In Uganda, schools serving less than 30 per cent of the pupils in SACMEQ II and SACMEQ III were considered to be in good condition by the school principals, which mean that over 70 per cent of the pupils in Uganda were in schools perceived to be in a poor condition. In Zambia, Kenya, Tanzania, and Mozambique, in SACMEQ III schools serving over half the pupils were reported to be in need of major repairs or complete rebuilding.

For SACMEQ III, except in Lesotho, the Seychelles, and Mauritius, schools in towns or cities were perceived to be in better condition than those in rural or isolated areas. The disparities between urban and rural schools appeared large in Zimbabwe and South Africa. In Zimbabwe, schools serving about 85 per cent of pupils in towns or cities were said to be in good condition, while only about 38 per cent of the schools serving pupils in rural or isolated areas were said to be in good condition.

It should be emphasized that these figures were based on principals' judgments about the condition of the school buildings. It is likely that school heads in different schools and in different countries would have different definitions of what constitutes a 'building in good condition' or a 'school that needs complete rebuilding'. Nevertheless, Zhang et al. (2008: 40) recommend that such 'differences between schools should be investigated independently and, if confirmed, taken into consideration when allocating resources for repairs and renovations'.

## Pupil-teacher ratio and school toilets

School heads were asked about the number of pupils and teachers in their schools. They were also asked about the numbers of toilets for pupils and staff. Responses to these questions were used to calculate the pupil-teacher ratios and pupil-toilet ratios given in Table 5 and Table 6 respectively.

## Pupil-teacher ratio

Perhaps it is worth noting that small pupil-teacher ratios have been linked with better pupil achievement in SACMEQ countries and elsewhere (for example, see Hungi and Thuku 2010). The overall average pupil-teacher ratios for SACMEQ II and SACMEQ III were 41.0 and 41.3, respectively. Malawi had the highest overall ratio in both SACMEQ II (70), and SACMEQ III (88), while the Seychelles had the lowest overall ratios in SACMEQ II (16.6) and SACMEQ III (14.2). The benchmark for the pupil-teacher ratio in most SACMEQ countries is around 40 pupils per teacher.

Between these two studies, the numbers went down noticeably in five school systems, namely the Seychelles, Mauritius, Zanzibar, South Africa, and Lesotho. A trend toward smaller pupil-teacher ratios is desirable because it means that pupils have more teachers to interact with and receive more attention. Thus, the pupil-teacher ratios in these five countries improved a lot between 2000 and 2007. In contrast, the numbers in four nations (Kenya, Mozambique, Tanzania, and Malawi) increased markedly, which means that there was a decline in the amount of teacher attention each individual pupil could expect in these countries. The pupil-teacher ratios in Botswana, Namibia, Swaziland, and Uganda remained more or less the same between 2000 and 2007.

For SACMEQ III, in most countries there were higher pupil-teacher ratios in rural than in urban schools. There was not much difference between the ratios in rural and urban areas in the Seychelles, Swaziland, Kenya, and Lesotho, and in three countries (Mauritius, Botswana, and Namibia), the ratio was noticeably lower in rural than in urban areas.

Table 5 Means for pupil-teacher ratio

|  | SACMEQ II (2000) |  |  |  |  |  | SACMEQ III (2007) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural |  | Urban |  | Overall |  | Rural |  | Urban |  | Overall |  |
|  | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 27.5 | 0.42 | 29.1 | 0.53 | 28.3 | 0.34 | 27.1 | 0.54 | 28.6 | 0.69 | 27.9 | 0.44 |
| Kenya | 34.1 | 0.93 | 31.8 | 1.36 | 33.4 | 0.77 | 43.4 | 1.27 | 41.8 | 1.62 | 42.9 | 1.00 |
| Lesotho | 53.1 | 2.38 | 55.2 | 3.65 | 53.9 | 2.00 | 41.2 | 1.42 | 42.9 | 2.00 | 41.8 | 1.16 |
| Malawi | 79.7 | 3.09 | 50.3 | 3.16 | 70.0 | 2.67 | 96.6 | 4.45 | 60.4 | 3.45 | 88.0 | 3.73 |
| Mauritius | 21.5 | 0.44 | 27.3 | 2.04 | 24.5 | 1.10 | 21.0 | 0.58 | 23.0 | 0.65 | 22.0 | 0.45 |
| Mozambique | 55.1 | 3.87 | 50.0 | 3.82 | 51.3 | 3.01 | 62.4 | 2.40 | 55.4 | 1.57 | 58.0 | 1.35 |
| Namibia | 33.4 | 0.53 | 28.1 | 0.58 | 31.5 | 0.44 | 30.4 | 0.37 | 32.1 | 0.82 | 31.1 | 0.39 |
| Seychelles | 13.2 | 0.01 | 17.2 | 0.00 | 16.6 | 0.00 | 14.2 | 0.04 | 14.2 | 0.01 | 14.2 | 0.01 |
| South Africa | 37.1 | 0.76 | 36.1 | 0.73 | 36.5 | 0.53 | 35.6 | 0.44 | 33.1 | 0.55 | 34.3 | 0.35 |
| Swaziland | 35.3 | 0.67 | 34.6 | 0.96 | 35.1 | 0.57 | 33.9 | 0.59 | 35.1 | 0.84 | 34.2 | 0.49 |
| Tanzania | 50.0 | 1.67 | 39.8 | 2.80 | 47.1 | 1.56 | 70.9 | 3.68 | 45.5 | 2.13 | 62.9 | 2.79 |
| Uganda | 59.3 | 2.23 | 53.0 | 5.03 | 58.0 | 2.05 | 60.0 | 1.70 | 44.2 | 1.86 | 55.7 | 1.42 |
| Zambia ${ }^{1}$ | 67.2 | 5.89 | 41.3 | 2.36 | 53.7 | 3.43 | $\times \times$ | $\times \times$ | x $\times$ | x× | $\times \times$ | x $\times$ |
| Zanzibar | 36.1 | 0.04 | 33.4 | 0.05 | 35.0 | 0.04 | 30.7 | 1.01 | 27.3 | 1.09 | 29.4 | 0.74 |
| Zimbabwe | $\times \times$ | x $\times$ | $\times \times$ | $\times \times$ | x $\times$ | x $\times$ | 37.0 | 0.98 | 32.3 | 1.15 | 35.5 | 0.80 |
| SACMEQ | 45.1 | 0.72 | 35.9 | 0.66 | 41.0 | 0.49 | 45.7 | 0.73 | 35.1 | 0.51 | 41.3 | 0.47 |

NOTE: ${ }^{1}$ There were some technical issues with the pupil-teacher ratio for Zambia in SACMEQ III.
Numbers in green indicate that the pupil-teacher ratio reduced between 2000 and 2007.

The changes in pupil-teacher ratios and in total school enrolments between 2000 and 2007 are displayed in Figure 5. It can be seen from Figure 5 that, with exception of Malawi (and to some extent Tanzania), the change in the pupil-teacher ratio was roughly directly proportional to the change in total school enrolments. In Kenya, Mozambique, and Tanzania school enrolments (which are a measure of access to education) increased markedly, but this was at the expense of the pupil-teacher ratio (a measure of the quality of education inputs).

Better balances between the change in total school enrolments and the change in pupilteacher ratio were achieved in the countries appearing in the bottom half of Figure 5, especially in Swaziland, Namibia, and Uganda, where total school enrolments increased and pupil-teacher ratios decreased (that is, they improved). The situation in Malawi was a little surprising because total school enrolment went down and the pupil-teacher ratio went up, although only slightly.


Figure 5 Changes in school enrolment and pupil-teacher ratio

## School toilets

Toilets are important facilities in schools because they have an impact on pupils' health. Schools are expected to have enough toilets to serve the pupils' sanitation needs and not endanger their well-being. It is important that the toilets are kept clean at all times. From experience, ratios of between 25 and 40 pupils per toilet are common in most schools, and serve the pupils' needs satisfactorily. Ratios of between 40 and 50 pupils per toilet, especially if the toilets are cleaned at least twice a day or as often as needed, could probably serve the purpose. However, hygiene becomes an issue when the ratios start to exceed 50 or thereabout. The benchmarks for the pupiltoilet ratio are usually stipulated by education authorities, and these are sometimes different for boys and girls. In Kenya, for example, the authorities have set the minimum standard for provision of toilets as 25 pupils per toilet for girls and 30 pupils per toilet for boys (Ngware et al., 2008).

On average, pupil-toilet ratios for SACMEQ II and SACMEQ III were 79 and 86.3 respectively - well beyond 50 , or what could be considered appropriate. Zanzibar had the highest number for SACMEQ II (163.4) while Mozambique had the highest number for SACMEQ III (228.9). The Seychelles had the lowest numbers for both SACMEQ II (23.5) and SACMEQ III
(28.6). In most SACMEQ countries, the numbers were troublingly high. For example, in both studies, heads in Uganda, Malawi, Zanzibar, and Mozambique reported that more than 100 pupils shared one toilet. This seems to reflect a general significant problem which should concern the education officials in these nations.

With a few exceptions, the pupil-toilet ratio remained almost the same in most countries between the two studies. The exceptions were Mozambique and Kenya, where the ratios were considerably higher in SACMEQ III than in SACMEQ II, and Namibia and Swaziland, where the ratios were considerably lower in SACMEQ III than in SACMEQ II.

Table 6 Means for pupil-toilet ratio

|  | SACMEQ II (2000) |  |  |  |  |  | SACMEQ III (2007) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural |  | Urban |  | Overall |  | Rural |  | Urban |  | Overall |  |
|  | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 48.2 | 2.69 | 40.8 | 3.46 | 44.4 | 2.21 | 37.4 | 3.49 | 38.9 | 3.31 | 38.1 | 2.41 |
| Kenya | 44.7 | 3.00 | 40.4 | 3.61 | 43.3 | 2.34 | 48.6 | 3.03 | 53.5 | 4.39 | 50.4 | 2.51 |
| Lesotho | 69.6 | 6.83 | 90.8 | 18.37 | 77.8 | 8.35 | 88.3 | 10.59 | 102.8 | 16.87 | 93.2 | 9.09 |
| Malawi | 104.1 | 9.05 | 126.9 | 13.34 | 111.6 | 7.55 | 114.9 | 9.47 | 162.9 | 33.04 | 126.3 | 10.91 |
| Mauritius | 34.9 | 1.64 | 39.4 | 2.21 | 37.2 | 1.40 | 37.0 | 2.27 | 40.2 | 3.92 | 38.6 | 2.23 |
| Mozambique | 78.9 | 10.07 | 139.2 | 10.34 | 123.9 | 8.31 | 183.0 | 17.70 | 255.6 | 17.54 | 228.9 | 12.86 |
| Namibia | 100.3 | 7.07 | 49.1 | 3.94 | 80.8 | 4.84 | 70.1 | 8.00 | 41.8 | 2.83 | 58.5 | 4.93 |
| Seychelles | 18.1 | 0.02 | 24.6 | 0.00 | 23.5 | 0.01 | 28.2 | 0.08 | 28.8 | 0.06 | 28.6 | 0.05 |
| South Africa | 84.6 | 15.27 | 36.8 | 2.67 | 56.6 | 6.87 | 66.8 | 4.50 | 41.2 | 3.07 | 53.7 | 2.76 |
| Swaziland | 106.3 | 13.28 | 64.7 | 5.65 | 93.7 | 9.75 | 73.7 | 7.02 | 66.4 | 5.36 | 71.5 | 5.16 |
| Tanzania | 57.2 | 4.39 | 118.6 | 21.09 | 75.0 | 7.14 | 70.2 | 4.63 | 98.9 | 8.25 | 79.3 | 4.22 |
| Uganda | 137.3 | 15.45 | 116.9 | 19.10 | 133.2 | 12.92 | 126.5 | 9.99 | 96.6 | 9.88 | 118.1 | 7.79 |
| Zambia ${ }^{1}$ | 41.9 | 4.24 | 46.8 | 4.84 | 44.5 | 3.21 | x $\times$ | $\times \times$ | x $\times$ | $\times \times$ | x $\times$ | x $\times$ |
| Zanzibar | 149.7 | 0.53 | 182.9 | 0.77 | 163.4 | 0.75 | 182.9 | 12.64 | 176.7 | 10.59 | 180.5 | 8.86 |
| Zimbabwe | x $\times$ | $\times \times$ | x $\times$ | $\times \times$ | x× | x× | 28.0 | 1.89 | 49.7 | 10.09 | 35.1 | 3.63 |
| SACMEQ III | 83.1 | 2.62 | 74.1 | 2.24 | 79.0 | 1.69 | 84.1 | 2.37 | 89.4 | 3.41 | 86.3 | 1.84 |

NOTE: ${ }^{1}$ There were some technical issues with the pupil-toilet ratio for Zambia in SACMEQ III.
Numbers in green indicate the pupil-toilet ratio reduced between 2000 and 2007.

For SACMEQ III, the pupil-toilet ratios were lower in urban than in rural schools in South Africa, Namibia, and Uganda, while the ratios were higher in urban than in rural schools in Mozambique, Malawi, Tanzania, and Zimbabwe. The differences in provision of toilets in rural and urban schools seemed particularly large in Mozambique and Malawi. In Mozambique, the rural average was 183 pupils per toilet while the average in urban schools was around 256 pupils per toilet.

## Free school meals

Some media reports in some SACMEQ countries, especially in Kenya, have linked pupil participation in education and improved school attendance to the availability of free meals in school, especially in rural areas. School feeding programmes (commonly abbreviated as SFP) are also thought to be important for the improvement of school efficiency in general. This is because
the time spent on meal breaks can be reduced and what is left can be used for remedial and targeted teaching, and private study by the pupils. Besides, in poor areas, these meals ensure that the pupils get at least the basic nutrients needed for growth, development, and concentration on learning activities.

The percentages of pupils in SACMEQ III who received at least one free meal at school are given in Table 7. On average, around 38 per cent of the pupils received at least one free school meal. There were large variations in the percentages across these 15 countries. Over 90 per cent of the pupils in Botswana, Lesotho, and Swaziland received free school meals, while none of the pupils in Zanzibar and Tanzania, and almost none of the pupils in the Seychelles and Zambia, received any free school meals.

In general, the percentages of pupils receiving free school meals were higher in rural areas than in towns and cities, especially in South Africa, Swaziland, Botswana, and Mozambique.

Table 7 Percentages for free school meals (SACMEQ III)

|  | Rural |  | Urban |  | Overall |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | SE | \% | SE | \% | SE |
| Botswana | 98.4 | 1.62 | 84.4 | 4.25 | 91.1 | 2.40 |
| Kenya | 14.3 | 3.55 | 17.7 | 5.93 | 15.5 | 3.09 |
| Lesotho | 97.7 | 1.78 | 91.8 | 4.59 | 95.7 | 1.96 |
| Malawi | 25.4 | 4.60 | 23.0 | 7.14 | 24.8 | 3.87 |
| Mauritius | 71.3 | 5.37 | 73.7 | 5.55 | 72.4 | 3.86 |
| Mozambique | 18.8 | 5.08 | 9.1 | 2.84 | 12.6 | 2.61 |
| Namibia | 27.3 | 3.48 | 23.0 | 3.58 | 25.6 | 2.57 |
| Seychelles | 0.6 | 0.35 | 0.0 | 0.00 | 0.2 | 0.11 |
| South Africa | 91.3 | 2.32 | 64.8 | 3.84 | 78.0 | 2.38 |
| Swaziland | 95.8 | 1.78 | 80.6 | 5.59 | 91.2 | 2.17 |
| Tanzania | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 |
| Uganda | 16.1 | 2.91 | 18.0 | 4.82 | 16.6 | 2.48 |
| Zambia | 2.2 | 1.52 | 0.0 | 0.00 | 1.4 | 0.98 |
| Zanzibar | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 |
| Zimbabwe | 41.3 | 5.23 | 45.0 | 7.96 | 42.7 | 4.40 |
| SACMEQ III | 39.8 | 1.09 | 34.9 | 1.41 | 37.9 | 0.77 |

## Behavioural problems

It is of interest to note that both pupils' and teachers' behavioural problems were reported to be significantly correlated with pupil achievement in several SACMEQ countries (Hungi and Thuku, 2010).

The school heads were presented with lists of 17 negative behaviours of pupils and 9 negative behaviours of teachers, and asked how often they had to deal with each of these issues in their schools. These behaviours included some that cause relatively little harm in schools, such as lateness, absenteeism, and skipping classes, and others that are rather more serious, such as alcohol abuse, sexual harassment of teachers by pupils, and sexual harassment of pupils by teachers.

For this report, school heads' responses to these questions were used to calculate indices of pupils' behavioural problems (maximum score $=17$ ) and teachers' behavioural problems (maximum score $=9$ ). In the calculation of these indices, the responses were coded as follows. If the school heads said they 'never' had to deal with a problem, the item was coded 0 ; if they said they 'sometimes' had to deal with it, the item was coded 0.5 ; and if they said they 'often' had to deal with the behaviour, the coding was 1 . Hence, low values on these indices are preferable because they indicate fewer behavioural problems among pupils (or teachers) in the school.

The data on behavioural problems were analysed, and the results are given in Figure 6 (for teachers' behavioural problems) and Figure 7 (for pupils' behavioural problems). The data used to plot these figures can be found in Appendix 1.

## Teachers' behavioural problems

As it can be seen from Figure 6, the behavioural problems of teachers increased in all countries except in Mozambique, where the level remained almost the same. Teachers' behaviour seemed to have deteriorated a lot, especially in seven countries (Uganda, Kenya, Malawi, Namibia, Lesotho, the Seychelles, and Swaziland). For SACMEQ III, the level of teachers' behavioural problems was troublingly high in Uganda compared with the levels in other countries. This must be worrying for the Ugandan authorities, especially because Uganda also recorded the highest level of pupils' behavioural problems in SACMEQ III (see below). Mauritius recorded the lowest level of teachers' behavioural problems in both studies.

The levels of teachers' behavioural problems in rural and urban schools were roughly the same in most SACMEQ III countries. The exceptions were Uganda, Zambia, and Lesotho where teachers in rural schools were reported to be better behaved than teachers in urban schools - and Zimbabwe, where teachers in urban schools were reported to be better behaved than their rural counterparts.

## Pupils' behavioural problems

From Figure 7, it can be seen that pupils' behavioural problems increased in most of the countries, especially in Kenya and Uganda, where their behaviours appeared to have deteriorated markedly. However, behaviour seemed to have improved noticeably in Tanzania and remained roughly the same in the Seychelles and Mozambique. Among the countries that participated in the SACMEQ III study, Mozambique had the lowest level of pupils' behavioural problems while Uganda had the highest level.

For SACMEQ III, there was little difference between the behavioural problems of pupils in rural and urban schools in most countries. The exceptions were Lesotho and Mozambique, where the rural pupils were perceived to be better behaved than their urban counterparts, and Zimbabwe and Botswana, where the reverse was the case.

Based on the summary of school head perceptions of teachers' and pupils' behavioural problems presented in Figure 6 and Figure 7, it is evident that action is needed to reduce these problems in most SACMEQ schools.

## Common behavioural problems of teachers and pupils

In general in SACMEQ countries, the most common pupils' behavioural problems reported by school heads were 'arriving late at school', 'absenteeism', and 'skipping classes'. These three problems were also reported by the school heads as the most common among teachers. The percentages for these three behavioural problems among pupils and teachers are presented in Appendix 2.

It should be noted that in computing the percentages given in Appendix 2 and in this section, the responses of 'never' and 'sometimes' were grouped together. In other words, a behaviour was not considered to be a major issue if the school heads said they 'never' or only 'sometimes' had to deal with it. However, if the school heads reported that they 'often' had to deal with a problem behaviour, it was considered to be a major issue.

The levels (in 2007) and changes (between 2000 and 2007) for the three most common behavioural problems among teachers and pupils are depicted in Figure 8. It can be seen from parts (a), (c), and (e) of this figure that school heads generally perceived the teachers to be better behaved than pupils in terms of arriving late to school, unjustified absence, and skipping classes. Interestingly, the patterns in parts (a), (c), and (e) of this figure suggest a link between teachers' and pupils' behavioural problems, since countries with higher percentages of teachers' problems also tended to have higher levels of pupils' problems. For example, in Uganda the percentages for skipping classes were relatively high for both teachers ( 30.8 per cent) and pupils ( 44.3 per cent) while in Botswana these percentages were relatively low for both teachers ( 4.3 per cent) and pupils ( 10.1 per cent). It is also interesting that the patterns in parts (b), (d), and (f) of Figure 8 suggest that changes in teachers' and pupils' behavioural problems might be interrelated, since in these countries, the change in the level of teachers' problems was approximately directly proportional to the corresponding change in the level of pupils' problems.

Because teachers are role models, it is not surprising that their behaviour can influence pupils' behaviours. If teachers arrive late to school or skip classes, pupils are likely to notice and emulate this behaviour. Thus, the important message here goes to the teachers. They need to be good role models to pupils by avoiding negative behaviours such as arriving late at school, absenteeism, and skipping classes.

Having said that, it should be stressed that the plots in Figure 8 are based on school heads' reports on how often they have to deal with behavioural problems, not on an objective tally of problem levels. It is possible that school heads in different schools and different countries will have different definitions of what 'often' or 'sometimes' means in this context. A head might likewise be inconsistent in judging, for instance, how frequently lateness should occur to rate as 'often' for a teacher and for a pupil. Although it is important to keep in mind this subjective element, even so the results obtained call for further investigation. These issues should be investigated in more depth, and if the links that are suggested here are confirmed, they should be taken into consideration when formulating policies regarding teachers arriving late at school, teacher absenteeism, and teachers skipping classes.


Figure 6 Teachers' behavioural problems


Figure $7 \quad$ Pupils' behavioural problems







Figure 8 Levels and changes in arriving late, absenteeism, and skipping classes

## Community contribution and community problems

School heads were asked what the community or parents contribute to the school. To assist them in responding to this question, they were presented with the following list of 14 school activities, and asked to state which of them the community or parents contributed to.

1. Building of school facilities (such as classrooms and teacher accommodation)
2. Maintenance of school facilities (such as classrooms and teacher accommodation)
3. Construction or maintenance and repair of furniture, equipment, etc.
4. The purchase of textbooks
5. The purchase of stationery
6. The purchase of other school supplies, materials and/or equipment
7. Payment of examination fees
8. Payment of the salaries of additional teachers
9. Payment of an additional amount on top of the normal salary of teachers
10. Payment of the salaries of non-teaching staff
11. Payment of an additional amount on top of the normal salary of non-teaching staff
12. Extra-curricular activities including school trips
13. Assisting teachers in teaching and/or teaching or supervising pupils themselves without pay
14. Provision of school meals

Data on school heads' responses to these items were analysed, and the results are given in Appendix 3 and depicted in Figure 9. For this report, data on the first two items in the list above (that is, 'building of school facilities' and 'maintenance of school facilities') were grouped together, and the results are given in Figure 9 under 'building/maintenance of school facilities'. Similarly, data on items 4 to 6 were grouped under 'Textbooks/ stationery/supplies', and data on items 8 and 9 were grouped under 'Salaries of additional teachers or top-up'. In addition, data on items 10 and 11 were grouped under 'Non-teaching staff salaries or top-up'.

It can be seen from the results in Figure 9 that communities were reported to have contributed to school activities in a comparable pattern across the SACMEQ II and SACMEQ III studies. Overall, in both studies, communities contributed most to school facilities and extracurricular activities, and contributed least in paying the salaries of additional teachers or topping-up the normal salary of teachers. In both studies, less than 20 per cent of the pupils were in schools in which the school heads reported that the community contributed to paying teachers' salaries, and over 60 per cent were in schools where it was reported to contribute to building facilities. In general, between the two studies, community contributions to non-teaching staff salaries, examination fees, and textbooks, stationery, and supplies decreased notably.

For SACMEQ III, there were large variations between countries on each community contribution item. For example, large percentages of the pupils in Zimbabwe ( 97.3 per cent), Swaziland ( 94.3 per cent), Malawi ( 92.3 per cent), and Tanzania ( 91.3 per cent) were in schools in which the community contributed to the building or maintenance of school facilities, but these percentages were small in Botswana ( 22 per cent) and Seychelles ( 8.2 per cent).


Figure 9 Contributions by the community to school activities (SACMEQ II and SACMEQ III)
Further analyses were undertaken by calculating an index of total community activities (the results are shown in Figure 10). Thus, communities contributed towards three to four school activities in most SACMEQ countries. For SACMEQ III, Mozambique had the lowest number (around two activities) while Swaziland had the highest number (just under seven activities). Between the two studies, community contributions appeared to have gone down drastically in some countries, especially in Lesotho, Kenya, and Tanzania. For SACMEQ III, community contributions were considerably more in towns and cities than in rural areas in seven countries (Uganda, South Africa, Zimbabwe, Swaziland, Mauritius, Malawi, and Tanzania), but the contributions were about the same in urban and rural areas in all the other countries.

School heads were also asked to what extent lack of cooperation from the community was a problem to their school. The options provided were 'not a problem', 'a minor problem', and 'a major problem'. For this report, a response of 'not a problem' or 'a minor problem' was taken to mean that there was no problem regarding the issue. A response of 'a major problem' was taken as a positive.

These data too were analysed, and the results are given in Figure 11. The extent to which community cooperation was thought to be problems in schools was about the same in both of the studies, with the exceptions of Mozambique and Zanzibar, where community cooperation was perceived to be a bigger problem in SACMEQ III than in SACMEQ II, and Tanzania, where the reverse was the case.


Figure 10 Total contributions of the community to school activities (SACMEQ II and SACMEQ III)


Figure 11 School community problems (SACMEQ II and SACMEQ III)

For SACMEQ III, except in the Seychelles, Zimbabwe, Namibia, and Mozambique, there was not much difference in the extent to which lack of cooperation was seen as a problem in schools in towns or cities, and schools in rural or isolated areas. In the Seychelles and Zimbabwe, schools
in cities and towns were perceived to have received better cooperation from the community than schools in rural areas, while the opposite was the case in Namibia and Mozambique.

## School days lost and school inspection

School days lost reduce learning time. In the SACMEQ II study, the school heads were asked how many official days they lost (that is, no teaching took place) in the last school year 'as a result of such things as late start of term, organization of examinations, school festivals, national celebrations, storms and so on'. In SACMEQ III, this question was modified and the last part read 'as a result of disruptions caused by factors beyond your control (for example, natural calamities, social unrest, and so on)'. This difference in definition is significant: school days lost in SACMEQ III were restricted to those lost because of factors beyond the control of the head, while in SACMEQ II they also included days lost because of factors (such as late start of term and organization of examinations) that were arguably within the head's control. Consequently, the data are not directly comparable.

School heads were also asked the last year their school had a full inspection or evaluation. There were seven options for the response, which were coded respectively as: this year ( 0.5 ), one year ago (1), two years ago (2), three years ago (3), four years ago (4), five years or more ago (5), and never inspected (6). School inspections are meant to ensure that quality and standards are maintained.

The data on school inspection were analysed, and the results are given in Table 8 together with the results of the questions about school days lost. It can be seen from Table 8 that on average schools lost around two and a half days in the last year of schooling before SACMEQ III data collection (that is, in 2006). The number varied between countries (see also Figure 12). For example, hardly any school days were lost in the Seychelles, Botswana, and Namibia, while around eight school days were lost in Uganda, South Africa, and Mozambique. It can further be seen that in most countries, the number of school days lost in rural schools was approximately equal to the number lost in town and cities. However, in Uganda, more days were lost in rural schools than in urban schools.

For school inspection, it can be seen from Table 8 that overall, around 40 per cent of the pupils in SACMEQ II were in schools that had full inspections in the year the data were collected (that is, 2000). This percentage dropped to 22.8 per cent in SACMEQ III (that is, in 2007), a significant change (beyond the limits of sampling errors). Around 17 per cent of the pupils in SACMEQ II and around 14 per cent for SACMEQ III were in schools where the head reported that there had never been a full inspection. This must be disturbing for the authorities in SACMEQ countries. For SACMEQ II, all 25 of the participating primary schools in the Seychelles had never been fully inspected.

Table 8 Percentages for full school inspection and means for school days lost

|  | What was the last year your school had a full inspection? |  |  |  |  |  |  |  |  |  |  |  |  |  | School inspections index |  |  |  |  |  | School days lost |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | This year |  | 1yr ago |  | 2 yrs ago |  | $3 y r s$ ago |  | 4yrs ago |  | 5+yrs ago |  | Never |  | Rural |  | Urban |  | Overall |  |  |  |
| 2000 | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 40.6 | 3.89 | 23.1 | 3.40 | 14.2 | 2.75 | 12.3 | 2.54 | 5.7 | 1.86 | 2.1 | 1.05 | 2.0 | 1.14 | 1.4 | 0.13 | 1.7 | 0.16 | 1.5 | 0.11 | $x \times$ | x $\times$ |
| Kenya | 81.8 | 3.40 | 17.9 | 3.40 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.2 | 0.18 | 0.1 | 0.12 | 0.6 | 0.02 | 0.6 | 0.04 | 0.6 | 0.02 | $x \times$ | $x \times$ |
| Lesotho | 41.5 | 4.19 | 8.7 | 2.28 | 11.1 | 2.58 | 7.7 | 2.27 | 6.9 | 2.12 | 16.8 | 3.10 | 7.3 | 2.15 | 2.1 | 0.20 | 2.7 | 0.29 | 2.3 | 0.17 | $x \times$ | $x \times$ |
| Malawi | 60.7 | 4.53 | 28.4 | 4.14 | 3.3 | 1.63 | 1.6 | 1.21 | 0.3 | 0.32 | 2.2 | 2.18 | 3.5 | 1.68 | 1.2 | 0.19 | 0.7 | 0.05 | 1.0 | 0.13 | $x \times$ | $x \times$ |
| Mauritius | 37.8 | 4.09 | 5.6 | 1.88 | 3.3 | 1.46 | 0.6 | 0.63 | 0.7 | 0.65 | 15.6 | 3.08 | 36.4 | 4.01 | 3.5 | 0.28 | 3.2 | 0.31 | 3.3 | 0.21 | $\times x$ | $x \times$ |
| Mozambique | 46.2 | 3.90 | 12.5 | 2.35 | 9.2 | 2.27 | 4.7 | 1.77 | 0.7 | 0.49 | 3.0 | 1.28 | 23.8 | 3.45 | 2.6 | 0.39 | 2.2 | 0.21 | 2.3 | 0.18 | $x \times$ | $\times \times$ |
| Namibia | 30.8 | 2.98 | 15.1 | 2.42 | 8.1 | 1.85 | 5.4 | 1.52 | 5.5 | 1.52 | 23.7 | 2.89 | 11.5 | 1.95 | 2.6 | 0.18 | 2.9 | 0.21 | 2.7 | 0.14 | $x \times$ | $x \times$ |
| Seychelles | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 6.0 | 0.00 | 6.0 | 0.00 | 6.0 | 0.00 | $x \times$ | x $\times$ |
| South Africa | 4.1 | 1.58 | 0.7 | 0.66 | 1.0 | 0.73 | 5.5 | 1.84 | 4.4 | 1.78 | 70.7 | 3.93 | 13.6 | 3.06 | 4.7 | 0.13 | 4.7 | 0.14 | 4.7 | 0.10 | $x \times$ | $x \times$ |
| Swaziland | 25.3 | 4.07 | 16.1 | 3.21 | 3.1 | 1.21 | 7.0 | 2.13 | 8.7 | 2.76 | 27.7 | 3.74 | 12.1 | 2.54 | 3.2 | 0.22 | 2.6 | 0.33 | 3.0 | 0.18 | x $\times$ | $x \times$ |
| Tanzania | 66.7 | 3.87 | 10.2 | 2.55 | 3.8 | 1.37 | 2.0 | 1.06 | 0.8 | 0.58 | 13.3 | 2.71 | 3.2 | 1.60 | 1.8 | 0.19 | 0.6 | 0.04 | 1.5 | 0.14 | $x \times$ | $x \times$ |
| Uganda | 61.1 | 4.41 | 24.2 | 3.83 | 4.7 | 2.01 | 0.6 | 0.44 | 1.3 | 0.89 | 2.6 | 1.74 | 5.5 | 1.96 | 1.2 | 0.16 | 0.9 | 0.21 | 1.2 | 0.13 | x $\times$ | x $\times$ |
| Zambia | 27.4 | 3.86 | 22.6 | 5.05 | 7.9 | 2.21 | 6.3 | 1.95 | 3.2 | 1.45 | 17.7 | 3.22 | 14.8 | 2.95 | 3.1 | 0.24 | 2.2 | 0.26 | 2.6 | 0.19 | $x \times$ | $x \times$ |
| Zanzibar | 38.2 | 0.38 | 34.3 | 0.25 | 7.3 | 0.11 | 7.8 | 0.06 | 3.0 | 0.02 | 2.6 | 0.02 | 6.8 | 0.14 | 1.4 | 0.01 | 1.8 | 0.02 | 1.6 | 0.01 | $\times \times$ | x $\times$ |
| Zimbabwe | $\times \times$ | $\times \times$ | x $\times$ | x $\times$ | $\times \times$ | x× | $\times \times$ | x $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | x× | x $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $x \times$ | $x \times$ |
| SACMEQ II | 40.2 | 1.00 | 15.7 | 0.80 | 5.5 | 0.46 | 4.4 | 0.42 | 3.0 | 0.36 | 14.2 | 0.73 | 17.2 | 0.65 | 2.2 | 0.06 | 2.7 | 0.06 | 2.5 | 0.04 | x $\times$ | $x \times$ |


| 2007 | What was the last year your school had a full inspection? |  |  |  |  |  |  |  |  |  |  |  |  |  | School inspections index |  |  |  |  |  | School days lost |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | This year |  | 1yr ago |  | 2yrs ago |  | 3 yrs ago |  | 4yrs ago |  | 5+yrs ago |  | Never |  | Rural |  | Urban |  | Overall |  |  |  |
|  | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 5.1 | 1.70 | 17.3 | 3.01 | 26.3 | 3.55 | 11.8 | 2.67 | 15.0 | 2.98 | 20.6 | 3.30 | 3.8 | 1.57 | 3.1 | 0.20 | 2.8 | 0.17 | 2.9 | 0.13 | 0.1 | 0.08 |
| Kenya | 36.0 | 3.90 | 33.0 | 3.79 | 11.7 | 2.52 | 3.7 | 1.65 | 3.8 | 1.48 | 5.5 | 1.83 | 6.3 | 2.31 | 1.5 | 0.15 | 1.9 | 0.30 | 1.7 | 0.14 | 1.7 | 0.35 |
| Lesotho | 27.7 | 3.87 | 27.1 | 3.55 | 12.6 | 2.84 | 9.9 | 2.47 | 5.4 | 2.01 | 11.5 | 2.60 | 5.7 | 1.99 | 1.9 | 0.16 | 2.4 | 0.30 | 2.1 | 0.15 | 0.6 | 0.15 |
| Malawi | 32.4 | 4.17 | 30.3 | 4.13 | 19.0 | 3.56 | 4.9 | 2.02 | 4.0 | 1.83 | 4.1 | 1.75 | 5.5 | 1.81 | 1.8 | 0.16 | 1.3 | 0.15 | 1.7 | 0.13 | 1.1 | 0.15 |
| Mauritius | 26.3 | 3.71 | 17.3 | 3.11 | 3.4 | 1.51 | 1.1 | 0.58 | 2.1 | 1.23 | 8.1 | 2.18 | 41.7 | 4.21 | 3.5 | 0.28 | 3.3 | 0.32 | 3.4 | 0.21 | 2.0 | 0.14 |
| Mozambique | 28.5 | 3.59 | 25.0 | 3.32 | 11.3 | 2.62 | 3.7 | 1.49 | 4.3 | 1.49 | 7.7 | 2.00 | 19.5 | 3.04 | 2.8 | 0.28 | 2.3 | 0.21 | 2.5 | 0.17 | 8.0 | 0.72 |
| Namibia | 9.8 | 2.05 | 11.6 | 2.15 | 14.6 | 2.39 | 8.4 | 1.74 | 8.5 | 1.85 | 27.1 | 2.87 | 20.1 | 2.69 | 3.5 | 0.17 | 3.8 | 0.20 | 3.6 | 0.13 | 0.2 | 0.06 |
| Seychelles | 18.7 | 0.05 | 12.4 | 0.03 | 4.0 | 0.01 | 19.5 | 0.05 | 4.1 | 0.12 | 20.3 | 0.16 | 21.0 | 0.10 | 3.2 | 0.01 | 3.4 | 0.00 | 3.3 | 0.00 | 0.0 | 0.00 |
| South Africa | 11.2 | 1.83 | 14.5 | 1.98 | 4.7 | 1.22 | 3.4 | 0.99 | 4.6 | 1.13 | 33.4 | 2.75 | 28.3 | 2.62 | 3.8 | 0.18 | 4.1 | 0.16 | 3.9 | 0.12 | 7.9 | 0.51 |
| Swaziland | 12.8 | 2.68 | 20.3 | 3.22 | 16.5 | 2.80 | 10.3 | 2.36 | 6.9 | 1.95 | 18.3 | 3.07 | 14.8 | 2.78 | 2.9 | 0.18 | 3.1 | 0.30 | 3.0 | 0.16 | 1.5 | 0.30 |
| Tanzania | 23.5 | 3.20 | 31.3 | 3.71 | 21.7 | 3.18 | 8.8 | 2.34 | 9.2 | 2.53 | 4.0 | 1.69 | 1.5 | 0.90 | 1.9 | 0.12 | 1.6 | 0.23 | 1.8 | 0.11 | 4.3 | 0.76 |
| Uganda | 54.0 | 3.31 | 27.8 | 2.97 | 3.9 | 1.21 | 1.9 | 0.89 | 3.1 | 1.14 | 2.8 | 1.05 | 6.6 | 1.68 | 1.3 | 0.12 | 1.4 | 0.21 | 1.3 | 0.11 | 7.8 | 0.95 |
| Zambia ${ }^{1}$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | x× | $\times \times$ | x $\times$ |
| Zanzibar | 16.4 | 2.55 | 23.7 | 2.95 | 20.4 | 2.69 | 11.0 | 1.98 | 7.6 | 1.42 | 13.1 | 2.28 | 7.9 | 2.08 | 2.4 | 0.17 | 2.6 | 0.19 | 2.5 | 0.13 | 0.7 | 0.11 |
| Zimbabwe | 16.0 | 3.32 | 18.7 | 3.70 | 13.6 | 3.54 | 8.4 | 3.38 | 6.3 | 2.19 | 28.5 | 4.41 | 8.5 | 3.17 | 3.2 | 0.24 | 2.5 | 0.30 | 3.0 | 0.19 | 2.9 | 0.43 |
| SACMEQ III | 22.8 | 0.79 | 22.2 | 0.84 | 13.1 | 0.72 | 7.6 | 0.49 | 6.1 | 0.49 | 14.5 | 0.61 | 13.7 | 0.69 | 2.5 | 0.05 | 2.8 | 0.07 | 2.6 | 0.04 | 2.3 | 0.10 |

NOTES: ${ }^{1}$ There were some technical issues with school inspection and school days lost data for Zambia in SACMEQ III.
Numbers in green indicate that a desirable trend was recorded between 2000 and 2007. Increases in percentages for 'This year', ' 1 year ago' or ' 2 years ago' were considered desirable while decreases in percentages for ' 3 years ago' or more were considered desirable.


Figure 12 School days lost (SACMEQ III)

For SACMEQ III, Uganda recorded the highest percentage for school inspected 'this year' ( 54 per cent) while Botswana recorded the lowest percentage in this category ( 5.1 per cent). At the other extreme, the percentages for 'never' inspected were lowest in Tanzania ( 1.5 per cent), followed by Botswana ( 3.8 per cent), and remarkably high in Mauritius ( 41.7 per cent), which must be worrying for the Mauritian authorities. Between the two studies, the percentages of schools that had never been fully inspected remained broadly the same in most countries, except in Kenya, South Africa, and Namibia, where the percentage went up by a statistically significant amount. Perhaps this is due to the establishment of new schools in these countries. The other exception was the Seychelles, where the percentage of schools that had never been fully inspected dropped drastically.

If cumulative percentages are considered, then less than half the pupils in SACMEQ III ( 45 per cent) were in schools that had had full inspections 'this year' or 'one year ago' (that is, $22.8+22.2$ ). Likewise, $58.1,65.7,71.8$, and 86.3 per cent of the pupils in SACMEQ III were in schools that had had full inspections two, three, four, and five years or more previously, respectively. These cumulative data also varied greatly between countries. For example, around four in every five pupils in Uganda ( 81.8 per cent) were in schools that had been inspected fully in the previous year, while only around one in every five pupils in Namibia ( 21.4 per cent) and Botswana ( 22.4 per cent) were in such schools.

For both studies, Uganda recorded the lowest overall values on the school inspection indices (that is, values of 1.2 and 1.3 for SACMEQ II and SACMEQ III, respectively (Figure 13). This means that average Grade 6 pupils in Uganda in both studies were in schools that had been fully inspected just over one year previously.


Figure 13 School inspection index

At the other end of the spectrum, South Africa had the highest school inspection index in SACMEQ III (3.9), which means that the average Grade 6 pupil in South Africa was in a school that had been fully inspected around four years previously.

Between the SACMEQ II and SACMEQ III studies, based on the school inspection index, incidences of full school inspection increased considerably in two countries (Seychelles and South Africa), while they decreased markedly in six countries (Malawi, Kenya, Zanzibar, Botswana, and Namibia), and remained roughly the same in another six countries (Uganda, Lesotho, Mozambique, Swaziland, Mauritius, and Tanzania). However, with the exceptions of Malawi and Zimbabwe, where there were more incidences of full inspection in urban areas than in rural areas, incidences of inspections in rural and urban schools were the same in the countries that participated in the SACMEQ III study.

## Actions taken when a teacher is absent for more than a week

The school heads in the SACMEQ III study were presented with a list of actions and asked how often they took each of them when a teacher was absent for a week or more. These ranged from relatively drastic responses such as 'send the pupils home' to milder actions such as 'combine class with another class'. The response options were 'never', 'sometimes', and 'often'. For this question, the responses 'never' and 'sometimes' were combined into a negative, while 'often' was taken as positive. The data were analysed, and the results are presented in Table 9.

The table shows clearly that the most common action taken by the school head was to substitute another teacher or take the class personally ( 95.3 per cent). The other popular actions were to combine the class with another class or to reallocate pupils to several other classes (79.3
per cent), or to leave the pupils to learn on their own or assign a senior pupil to supervise the class ( 52 per cent).

Country variations are also apparent. For example, combining or reallocating the class was more popular in Zimbabwe ( 94.5 per cent) than in Tanzania ( 48.5 per cent), while leaving pupils to learn on their own or assigning a senior pupil to supervise the class was more popular in the Seychelles ( 78.8 per cent) than in Mauritius ( 11.3 per cent). Substituting with a parent or a community member was more popular in Namibia ( 32.8 per cent) and South Africa ( 32.1 per cent) than in the other countries, while sending pupils home was an action considered more often in Mozambique ( 23.5 per cent) and Swaziland ( 23.7 per cent) than in the other countries.

Table 9 Actions often taken by school heads when a teacher is absent for a week or more

|  | Send pupils home |  | Leave pupils alone/ assign a senior pupil |  | Combine class/ reallocate pupils |  | Substitute with parent/ community member |  | Substitute with a teacher/ school head |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE |
| Botswana | 7.1 | 2.12 | 58.0 | 4.02 | 91.7 | 2.25 | 2.0 | 1.21 | 95.5 | 1.61 |
| Kenya | 8.1 | 2.28 | 53.1 | 4.11 | 67.4 | 3.86 | 2.3 | 1.22 | 91.9 | 2.28 |
| Lesotho | 13.7 | 2.92 | 53.4 | 4.19 | 72.2 | 3.77 | 6.5 | 2.10 | 92.0 | 2.12 |
| Malawi | 11.7 | 2.92 | 26.6 | 3.95 | 60.8 | 4.44 | 1.5 | 1.09 | 98.1 | 1.26 |
| Mauritius | 0.8 | 0.82 | 11.3 | 2.83 | 88.3 | 2.84 | 0.4 | 0.42 | 99.3 | 0.71 |
| Mozambique | 23.5 | 3.32 | 42.2 | 3.92 | 90.2 | 2.19 | 1.1 | 0.78 | 94.5 | 1.96 |
| Namibia | 11.2 | 2.12 | 69.8 | 2.98 | 90.4 | 1.83 | 32.8 | 2.94 | 90.2 | 1.98 |
| Seychelles | 10.6 | 0.03 | 78.8 | 0.06 | 91.6 | 0.02 | 4.7 | 0.01 | 100.0 | 0.00 |
| South Africa | 14.8 | 2.04 | 43.8 | 2.83 | 90.3 | 1.56 | 32.1 | 2.61 | 88.2 | 1.78 |
| Swaziland | 23.7 | 3.32 | 63.8 | 3.73 | 73.2 | 3.44 | 7.0 | 1.95 | 95.3 | 1.60 |
| Tanzania | 5.9 | 2.32 | 66.6 | 3.71 | 48.5 | 3.92 | 9.4 | 2.29 | 93.1 | 1.86 |
| Uganda | 10.2 | 2.05 | 43.6 | 3.31 | 59.3 | 3.26 | 5.0 | 1.42 | 98.2 | 0.90 |
| Zambia | 18.4 | 3.46 | 54.0 | 4.42 | 90.1 | 2.49 | 15.1 | 3.33 | 98.8 | 0.85 |
| Zanzibar | 11.4 | 1.99 | 66.8 | 2.88 | 85.1 | 1.82 | 4.8 | 1.79 | 100.0 | 0.00 |
| Zimbabwe | 4.5 | 1.75 | 46.6 | 4.68 | 94.5 | 2.09 | 1.6 | 1.02 | 94.2 | 2.04 |
| SACMEQ III | 11.7 | 0.66 | 52.0 | 0.92 | 79.3 | 0.77 | 8.4 | 0.47 | 95.3 | 0.39 |

NOTE: Include qualified or unqualified teacher, and relief or regular teacher.

## Summary

In this paper selected information about characteristics of school heads and schools in SACMEQ school systems has been presented.
The main points from this paper are summarized in Table 10. In this table, information is given about each factor in 2007 (SACMEQ III) and changes that took place in the factor between 2000 and 2007.

Table 10 Summary of situation in 2007 and changes in school head and school characteristics between 2000 and 2007

|  |  | Situation in 2007 (SACMEQ III) | Changes between 2000 and 2007 (SACMEQ II and SACMEQ III) |
| :---: | :---: | :---: | :---: |
|  | School head age | Mozambique had the youngest school heads (about 40 years) while Mauritius had the oldest (about 56 years). In Mauritius, over 90 per cent of the pupils had school heads who were older than 50 . | The average age of the school heads increased in most countries, especially in Seychelles and Malawi where the average age went up by around five years. |
|  | Female school head | Just over one-third of the school heads were female ( 36.6 per cent) but this varied greatly between countries. Malawi ( 12.8 per cent) and Kenya ( 14.7 per cent) had the lowest percentages of female heads while the Seychelles ( 82.8 per cent) and Lesotho ( 79.4 per cent) had the highest percentages. <br> Except in Lesotho and Seychelles, all SACMEQ countries had large gender imbalances in school head positions in favour of males. | The percentages of female heads remained about the same in most countries, except in Botswana, Kenya, Mozambique, Namibia, and Uganda where the percentages increased noticeably. |
|  | Highest level of education | The most common school head education level was senior secondary ( 36.8 per cent) followed by A-level ( 25.3 per cent) and university degree ( 23.7 per cent), but this varied between countries. For example, over 60 per cent of the pupils in the Seychelles, Zimbabwe, and South Africa had school heads with university education, while hardly any of the pupils in Malawi and Tanzania had school heads with university education. | The levels of pupils with school heads with university education increased considerably in most countries, except in Zambia (where the level dropped markedly), Mozambique, Malawi, and Tanzania (where the levels remained almost the same). |
|  | Pre-service training | On average, school heads had received 2.7 years of pre-service training, but this varied from 2 years in Malawi to 3.5 years in South Africa and Zimbabwe. | The average number of years of pre-service training remained almost the same in most countries, with exceptions of Mauritius and Zanzibar, where the numbers went down a lot, and Botswana and Namibia, where these numbers increased considerably. |
|  | Special training on school management | About two-thirds ( 68.7 per cent) of the pupils had school heads who had received special training on school management, but this varied from 39.3 per cent in Tanzania to 94.1 per cent in Swaziland. | Apart from Mozambique and Botswana - which recorded considerable improvement in the levels of management training - most countries recorded downward trends in the levels of management training. |
|  | Experience <br> - Years of teaching <br> - Years as a school head | In terms of experience as school managers, Swaziland (12.3 years) had the most experienced heads while Mauritius ( 4.6 years) had the least experienced. The average was about 24 years. <br> In terms of experience as teachers, Mauritius (33.9 years) had the most experienced heads and Tanzania ( 17.4 years) had the least experienced. The average was about 9 years. | For experience as a school head, the averages remained roughly the same in most countries, except Mauritius and Malawi where the averages increased noticeably - and Botswana, Namibia, and Lesotho - where the averages decreased considerably. <br> For experience as a teacher, the averages increased in most countries, except Lesotho (where the average decreased notably), and Tanzania and Zambia, where the averages remained roughly the same. |
|  | Hours of teaching per week | The average pupil had a school head who taught around eight hours a week. <br> School heads who taught the fewest hours per week were in Botswana (1.3), followed by Mauritius (1.6) and the Seychelles (1.8), while those who taught most hours per week were in Malawi (14.0) and Kenya (14.5). <br> In general, school heads in rural areas taught more hours per week than school heads in urban areas, especially in Zambia and Malawi. | School heads' teaching hours per week decreased, except in Mozambique and Malawi, where they went up considerably. |

## Situation

in 2007 (SACMEQ III)

School location

Conditions of school buildings

Pupil-teacher ratio

## Provision of toilets

## Provision of free

 meals at schoolAbout three in five pupils (59.7 per cent) were in schools located in rural areas.
Seychelles ( 31.0 per cent) had the lowest level of pupils in rural schools, while Malawi (76.2 per cent), Uganda ( 72.7 per cent), and Zimbabwe ( 71.1 per cent) had the highest levels.
Around half ( 52.5 per cent) of the pupils were in schools perceived to have good-condition building s. Schools serving over 70 per cent of the pupils in Uganda were reported to be in need of major repairs or complete rebuilding.

The average pupil-teacher ratio was around 41 pupils per teacher, but this varied from 88 pupils per teacher in Malawi to around 14 pupils per teacher in the Seychelles.
Pupil-teacher ratios were higher in rural schools than in urban schools except in Mauritius, Botswana, and Namibia.

The average pupil-toilet ratio was around 86 pupils per toilet. In most countries, the pupiltoilet ratios were too high, and well beyond what could be considered appropriate, especially in Mozambique (229), Zanzibar (181), Malawi (126), and Uganda (118).
Mozambique had the highest ratio (around 229 pupils per toilet) while Seychelles had the lowest ratio (around 29 pupils per toilet).

## Behavioura <br> problems

- Teachers'
behavioural
problems
- Pupils'
behavioural
problems


## Changes

between 2000 and 2007 (SACMEQ II and SACMEQ III)
Apart from Zambia and Mozambique, where the proportions of pupils in rural schools increased markedly, the proportions of pupils in rural schools remained more or less the same.

Conditions of school buildings were perceived to have improved in most countries (especially in Lesotho and Uganda), except in Kenya, Mozambique, Tanzania, and Zambia, where they were perceived to have deteriorated
Pupil-teacher ratios improved noticeably in five countries (the Seychelles, Mauritius, Zanzibar, South Africa, and Lesotho), deteriorated in four countries (Kenya, Mozambique, Tanzania, and Malawi), and remained about the same in Botswana, Namibia, Swaziland, and Uganda.
In general, changes in the pupil-teacher ratios were approximately directly proportional to the changes in the total school enrolments.
The levels of toilet provision remained almost the same in most countries, but in Mozambique and Kenya they went down notably, and in Namibia and Swaziland they improved appreciably.

Teachers' behaviour deteriorated in all countries except in Mozambique, where it remained roughly the same.
Pupils' behaviour also deteriorated in most SACMEQ countries (especially in Kenya and Uganda), except in Tanzania where it improved noticeably
In general, the changes in teachers' behavioural problems were approximately directly proportional to the changes in pupils' behavioural problems.


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Appendices

Appendix 1: Means for pupils' and teachers' behavioural problems indices

| 2000 | PUPILS' BEHAVIOUR PROBLEMS INDEX (max=17) |  |  |  |  |  | TEACHERS' BEHAVIOUR PROBLEMS INDEX (max=9) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural |  | Urban |  | Overall |  | Rural |  | Urban |  | Overall |  |
|  | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 5.9 | 0.23 | 6.0 | 0.26 | 6.0 | 0.17 | 1.5 | 0.11 | 1.4 | 0.11 | 1.4 | 0.08 |
| Kenya | 4.8 | 0.25 | 4.9 | 0.28 | 4.9 | 0.19 | 1.5 | 0.11 | 1.3 | 0.13 | 1.4 | 0.09 |
| Lesotho | 6.1 | 0.21 | 6.2 | 0.25 | 6.1 | 0.16 | 1.5 | 0.12 | 1.7 | 0.15 | 1.6 | 0.10 |
| Malawi | 6.5 | 0.27 | 5.7 | 0.35 | 6.2 | 0.22 | 2.0 | 0.21 | 1.8 | 0.17 | 2.0 | 0.15 |
| Mauritius | 4.6 | 0.25 | 4.7 | 0.25 | 4.6 | 0.18 | 1.0 | 0.07 | 1.1 | 0.09 | 1.0 | 0.06 |
| Mozambique | 5.0 | 0.26 | 4.9 | 0.18 | 4.9 | 0.15 | 1.6 | 0.11 | 1.8 | 0.09 | 1.7 | 0.07 |
| Namibia | 6.2 | 0.24 | 6.0 | 0.25 | 6.1 | 0.18 | 1.7 | 0.12 | 1.5 | 0.12 | 1.7 | 0.09 |
| Seychelles | 4.7 | 0.00 | 6.5 | 0.00 | 6.2 | 0.00 | 1.1 | 0.00 | 1.6 | 0.00 | 1.5 | 0.00 |
| South Africa | 6.3 | 0.35 | 6.6 | 0.65 | 6.5 | 0.40 | 2.0 | 0.22 | 1.4 | 0.16 | 1.6 | 0.14 |
| Swaziland | 6.0 | 0.29 | 6.9 | 0.44 | 6.3 | 0.25 | 1.6 | 0.13 | 1.8 | 0.20 | 1.6 | 0.11 |
| Tanzania | 7.7 | 0.26 | 7.9 | 0.58 | 7.7 | 0.25 | 1.9 | 0.14 | 1.9 | 0.22 | 1.9 | 0.12 |
| Uganda | 7.7 | 0.43 | 6.7 | 0.59 | 7.5 | 0.36 | 2.8 | 0.25 | 2.2 | 0.40 | 2.6 | 0.21 |
| Zambia | 6.7 | 0.25 | 7.1 | 0.66 | 6.9 | 0.37 | 1.8 | 0.16 | 2.2 | 0.17 | 2.0 | 0.12 |
| Zanzibar | 5.9 | 0.01 | 6.5 | 0.04 | 6.1 | 0.02 | 1.5 | 0.01 | 1.7 | 0.01 | 1.6 | 0.01 |
| Zimbabwe | x $\times$ | $\times \times$ | x× | x $\times$ | $\times \times$ | x× | x $\times$ | x $\times$ | x× | $\times \times$ | $\times \times$ | x× |
| SACMEQ II | 6.2 | 0.08 | 6.1 | 0.11 | 6.2 | 0.07 | 1.7 | 0.05 | 1.6 | 0.04 | 1.7 | 0.03 |


| 2007 | PUPILS' BEHAVIOUR PROBLEMS INDEX (max=17) |  |  |  |  |  | TEACHERS' BEHAVIOUR PROBLEMS INDEX ( $m a x=9$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural |  | Urban |  | Overall |  | Rural |  | Urban |  | Overall |  |
|  | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| Botswana | 6.9 | 0.34 | 6.2 | 0.27 | 6.5 | 0.22 | 1.7 | 0.18 | 1.4 | 0.14 | 1.6 | 0.11 |
| Kenya | 6.7 | 0.34 | 7.0 | 0.46 | 6.8 | 0.27 | 2.2 | 0.18 | 2.1 | 0.25 | 2.2 | 0.15 |
| Lesotho | 6.1 | 0.34 | 7.5 | 0.42 | 6.6 | 0.27 | 1.8 | 0.18 | 2.2 | 0.21 | 1.9 | 0.14 |
| Malawi | 7.0 | 0.39 | 7.4 | 0.54 | 7.1 | 0.33 | 2.4 | 0.23 | 2.3 | 0.27 | 2.3 | 0.19 |
| Mauritius | 5.5 | 0.28 | 5.2 | 0.26 | 5.3 | 0.19 | 1.1 | 0.08 | 1.3 | 0.14 | 1.2 | 0.08 |
| Mozambique | 4.1 | 0.18 | 4.9 | 0.22 | 4.6 | 0.16 | 1.5 | 0.09 | 1.9 | 0.10 | 1.7 | 0.07 |
| Namibia | 7.0 | 0.30 | 7.0 | 0.26 | 7.0 | 0.21 | 2.1 | 0.17 | 1.9 | 0.15 | 2.0 | 0.12 |
| Seychelles | 5.7 | 0.01 | 6.1 | 0.00 | 6.0 | 0.01 | 1.8 | 0.01 | 1.9 | 0.00 | 1.8 | 0.00 |
| South Africa | 6.9 | 0.28 | 7.1 | 0.18 | 7.0 | 0.17 | 1.9 | 0.15 | 1.6 | 0.10 | 1.7 | 0.09 |
| Swaziland | 6.7 | 0.32 | 6.4 | 0.39 | 6.6 | 0.25 | 2.0 | 0.21 | 1.7 | 0.23 | 1.9 | 0.16 |
| Tanzania | 6.8 | 0.36 | 6.2 | 0.51 | 6.6 | 0.29 | 2.1 | 0.19 | 1.9 | 0.29 | 2.0 | 0.16 |
| Uganda | 9.7 | 0.31 | 9.8 | 0.62 | 9.7 | 0.28 | 3.7 | 0.21 | 4.3 | 0.37 | 3.9 | 0.18 |
| Zambia | 7.7 | 0.34 | 8.0 | 0.47 | 7.8 | 0.28 | 2.1 | 0.20 | 2.5 | 0.25 | 2.2 | 0.16 |
| Zanzibar | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | x $\times$ | x× | x $\times$ | x $\times$ |
| Zimbabwe | 7.9 | 0.41 | 6.4 | 0.43 | 7.4 | 0.32 | 3.0 | 0.27 | 2.0 | 0.17 | 2.7 | 0.20 |
| SACMEQ III | 6.9 | 0.10 | 6.6 | 0.09 | 6.8 | 0.07 | 2.2 | 0.06 | 2.0 | 0.05 | 2.1 | 0.04 |

NOTE: ${ }^{1}$ There were some technical issues with pupils' and teachers' behavioural problems for Zanzibar in SACMEQ III.
Numbers in green indicate that behavioural problems reduced between 2000 and 2007.

Appendix 2: Percentage for selected pupils' and teachers' behavioural problems

| 2000 | Selected pupils' behavioural problems |  |  |  |  |  |  |  |  |  | Selected teachers' behavioural problems |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Arriving late |  | Absenteeism |  | Skip classes |  | Drug abuse |  | Alcohol abuse |  | Arriving late |  | Absenteeism |  | Skip classes |  | Drug abuse |  | Alcohol abuse |  |
|  | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE |
| Botswana | 39.1 | 3.88 | 38.7 | 3.87 | 1.9 | 1.00 | 3.9 | 1.54 | 0.7 | 0.47 | 5.6 | 1.82 | 7.1 | 2.11 | 1.2 | 0.89 | 0.0 | 0.00 | 0.5 | 0.50 |
| Kenya | 16.9 | 3.20 | 17.9 | 3.21 | 6.4 | 1.88 | 2.1 | 1.04 | 1.7 | 1.00 | 3.5 | 1.39 | 3.2 | 1.31 | 2.9 | 1.28 | 0.1 | 0.05 | 1.5 | 1.02 |
| Lesotho | 38.2 | 4.08 | 33.7 | 4.03 | 5.4 | 1.82 | 3.3 | 1.46 | 1.7 | 1.18 | 10.8 | 2.56 | 7.0 | 2.13 | 6.7 | 2.32 | 0.7 | 0.67 | 1.4 | 1.02 |
| Malawi | 35.6 | 4.33 | 43.6 | 4.55 | 14.1 | 3.18 | 4.3 | 1.84 | 4.9 | 1.91 | 19.1 | 3.88 | 10.0 | 2.72 | 6.9 | 2.24 | 4.3 | 1.84 | 4.7 | 1.96 |
| Mauritius | 19.8 | 3.43 | 26.5 | 3.65 | 2.2 | 1.24 | 0.0 | 0.00 | 0.0 | 0.00 | 9.2 | 2.16 | 3.8 | 1.55 | 0.8 | 0.80 | 0.0 | 0.00 | 0.0 | 0.00 |
| Mozambique | 22.4 | 2.88 | 22.3 | 3.08 | 5.5 | 1.56 | 1.6 | 1.01 | 0.6 | 0.46 | 8.7 | 2.38 | 4.6 | 1.41 | 0.3 | 0.26 | 0.5 | 0.49 | 5.3 | 2.02 |
| Namibia | 33.4 | 3.04 | 32.9 | 3.11 | 10.0 | 1.95 | 1.3 | 0.77 | 3.7 | 1.33 | 8.9 | 1.92 | 8.2 | 1.82 | 6.3 | 1.63 | 1.7 | 0.87 | 3.3 | 1.16 |
| Seychelles | 18.8 | 0.01 | 28.4 | 0.02 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 3.8 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 |
| South Africa | 45.4 | 4.45 | 38.4 | 4.44 | 14.0 | 3.85 | 8.2 | 3.45 | 6.9 | 3.34 | 12.4 | 2.71 | 8.3 | 2.28 | 4.3 | 1.49 | 1.9 | 1.15 | 1.0 | 0.69 |
| Swaziland | 57.4 | 4.21 | 35.2 | 4.05 | 16.5 | 3.19 | 6.4 | 2.52 | 6.4 | 1.98 | 13.3 | 2.70 | 11.4 | 2.49 | 4.6 | 1.51 | 1.8 | 0.92 | 2.6 | 1.11 |
| Tanzania | 40.4 | 4.17 | 45.6 | 4.15 | 35.6 | 4.00 | 5.9 | 2.00 | 6.4 | 2.02 | 14.4 | 2.70 | 10.8 | 2.46 | 11.2 | 2.37 | 2.3 | 1.10 | 6.7 | 2.10 |
| Uganda | 49.7 | 4.53 | 40.2 | 4.34 | 27.0 | 3.99 | 9.0 | 2.51 | 9.5 | 2.58 | 24.9 | 3.99 | 23.0 | 3.67 | 16.8 | 3.54 | 10.7 | 2.77 | 11.3 | 2.80 |
| Zambia | 51.7 | 4.63 | 41.5 | 4.87 | 14.3 | 3.00 | 8.7 | 5.03 | 10.4 | 5.03 | 21.3 | 5.14 | 8.5 | 5.03 | 7.8 | 5.03 | 1.8 | 1.00 | 3.9 | 1.51 |
| Zanzibar | 27.4 | 0.33 | 23.3 | 0.34 | 13.0 | 0.35 | 1.9 | 0.06 | 0.0 | 0.00 | 12.2 | 0.33 | 7.4 | 0.32 | 4.8 | 0.03 | 2.4 | 0.02 | 2.4 | 0.02 |
| Zimbabwe | $\times \times$ | x× | $\times \times$ | x× | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | x $\times$ | $\times \times$ | xx | x× | $\times \times$ | $\times \times$ | xx | $\times \times$ | $\times \times$ | x× |
| SACMEQ II | 35.5 | 0.99 | 33.5 | 1.03 | 11.9 | 0.69 | 4.0 | 0.57 | 3.8 | 0.54 | 12.0 | 0.77 | 8.1 | 0.66 | 5.4 | 0.60 | 2.0 | 0.29 | 3.2 | 0.36 |


| 2007 | Selected pupils' behavioural problems |  |  |  |  |  |  |  |  |  | Selected teachers' behavioural problems |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Arriving late |  | Absenteeism |  | Skip classes |  | Drug abuse |  | Alcohol abuse |  | Arriving late |  | Absenteeism |  | Skip classes |  | Drug abuse |  | Alcohol abuse |  |
|  | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE |
| Botswana | 49.6 | 4.08 | 35.0 | 3.83 | 10.1 | 2.38 | 5.3 | 1.77 | 5.3 | 1.77 | 10.1 | 2.40 | 8.2 | 2.24 | 4.3 | 1.61 | 2.5 | 1.26 | 3.7 | 1.52 |
| Kenya | 43.2 | 4.07 | 38.4 | 3.89 | 19.3 | 3.38 | 6.1 | 1.96 | 5.6 | 1.98 | 13.8 | 2.67 | 9.0 | 2.59 | 10.4 | 2.43 | 3.2 | 1.33 | 7.8 | 2.57 |
| Lesotho | 42.4 | 4.21 | 42.8 | 4.18 | 10.1 | 2.54 | 8.8 | 2.47 | 4.8 | 1.80 | 23.8 | 3.68 | 19.0 | 3.42 | 6.4 | 2.03 | 2.9 | 1.38 | 6.3 | 2.03 |
| Malawi | 53.8 | 4.49 | 47.0 | 4.49 | 22.6 | 3.74 | 11.0 | 2.84 | 9.3 | 2.54 | 30.7 | 4.13 | 18.3 | 3.50 | 9.3 | 2.52 | 7.5 | 2.27 | 8.6 | 2.46 |
| Mauritius | 29.3 | 3.75 | 29.6 | 3.69 | 3.6 | 1.52 | 2.5 | 1.36 | 2.0 | 1.10 | 11.9 | 2.58 | 4.7 | 1.75 | 0.2 | 0.01 | 0.9 | 0.77 | 0.9 | 0.77 |
| Mozambique | 31.3 | 3.60 | 32.4 | 3.66 | 16.4 | 2.88 | 0.6 | 0.55 | 0.7 | 0.71 | 5.5 | 1.82 | 3.9 | 1.49 | 2.9 | 1.23 | 0.7 | 0.71 | 0.7 | 0.71 |
| Namibia | 48.9 | 3.34 | 41.1 | 3.26 | 19.6 | 2.64 | 2.9 | 1.10 | 5.2 | 1.46 | 14.6 | 2.38 | 13.7 | 2.30 | 9.9 | 2.07 | 2.6 | 1.11 | 3.3 | 1.20 |
| Seychelles | 3.4 | 0.01 | 14.7 | 0.04 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 3.4 | 0.01 | 10.5 | 0.03 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 |
| South Africa | 51.5 | 2.90 | 32.1 | 2.65 | 11.6 | 1.82 | 7.2 | 1.43 | 5.2 | 1.22 | 11.8 | 1.80 | 11.0 | 1.72 | 5.9 | 1.37 | 3.1 | 1.01 | 3.3 | 0.99 |
| Swaziland | 49.5 | 3.93 | 30.7 | 3.60 | 16.2 | 2.85 | 8.1 | 2.13 | 6.9 | 1.98 | 14.1 | 2.71 | 9.7 | 2.28 | 8.7 | 2.18 | 6.0 | 1.85 | 7.1 | 2.02 |
| Tanzania | 28.9 | 3.53 | 29.7 | 3.56 | 19.7 | 3.14 | 6.1 | 1.70 | 6.8 | 1.80 | 11.5 | 2.67 | 8.3 | 1.95 | 7.6 | 1.95 | 7.6 | 2.04 | 8.4 | 2.25 |
| Uganda | 71.8 | 2.99 | 67.3 | 3.14 | 44.3 | 3.28 | 23.4 | 2.75 | 23.1 | 2.71 | 44.8 | 3.31 | 42.2 | 3.28 | 30.8 | 2.99 | 21.8 | 2.74 | 25.1 | 2.89 |
| Zambia | 63.4 | 4.31 | 48.8 | 4.44 | 20.9 | 3.66 | 4.5 | 1.89 | 9.0 | 2.58 | 16.4 | 3.34 | 9.6 | 2.63 | 5.9 | 2.13 | 5.2 | 2.03 | 6.4 | 2.17 |
| Zanzibar | $\times \times$ | x× | $\times \times$ | x $\times$ | $\times \times$ | xx | $\times \times$ | $\times \times$ | $\times \times$ | x× | x× | x× | $\times \times$ | x $\times$ | x $\times$ | x $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | xx |
| Zimbabwe | 57.1 | 4.63 | 47.7 | 4.71 | 18.8 | 3.60 | 8.8 | 2.64 | 8.8 | 2.64 | 22.8 | 3.99 | 22.0 | 3.87 | 11.3 | 2.92 | 4.5 | 1.93 | 5.3 | 2.08 |
| SACMEQ III | 44.3 | 1.03 | 38.2 | 0.99 | 16.6 | 0.74 | 6.8 | 0.51 | 6.6 | 0.51 | 16.8 | 0.82 | 13.6 | 0.70 | 8.1 | 0.57 | 4.9 | 0.43 | 6.2 | 0.50 |

Notes: Numbers in green indicate that behavioural problems reduced between 2000 and 2007.
The responses 'never' and 'sometimes' were grouped together in the computation of these percentages.

Appendix 3: Community contribution to school activities and school community problems

| 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | \% | SE | Mean | SE | \% | SE |
| Botswana | 25.1 | 3.42 | 5.8 | 1.75 | 19.4 | 3.01 | 1.0 | 0.73 | 2.3 | 1.23 | 79.0 | 3.28 | 92.1 | 2.15 | 15.8 | 2.84 | 30.0 | 3.65 | 2.7 | 0.10 | 24.7 | 3.45 |
| Kenya | 93.4 | 2.17 | 92.4 | 2.32 | 92.9 | 2.25 | 94.3 | 2.02 | 41.9 | 4.16 | 77.2 | 3.69 | 85.2 | 3.12 | 27.6 | 3.83 | 19.6 | 3.22 | 6.2 | 0.15 | 27.3 | 3.75 |
| Lesotho | 86.5 | 2.83 | 64.4 | 4.01 | 81.3 | 3.15 | 99.7 | 0.28 | 58.5 | 4.15 | 69.9 | 3.84 | 88.7 | 2.60 | 31.5 | 3.89 | 79.1 | 3.13 | 6.6 | 0.14 | 29.3 | 3.86 |
| Malawi | 86.9 | 3.09 | 38.5 | 4.50 | 34.2 | 4.31 | 7.2 | 2.30 | 0.9 | 0.62 | 16.8 | 3.38 | 40.3 | 4.44 | 30.0 | 4.20 | 2.9 | 1.53 | 2.6 | 0.15 | 16.6 | 3.61 |
| Mauritius | 35.4 | 4.05 | 66.4 | 3.88 | 73.4 | 3.62 | 14.4 | 2.92 | 0.0 | 0.00 | 2.4 | 1.50 | 88.0 | 2.61 | 4.2 | 1.82 | 6.5 | 1.83 | 2.9 | 0.10 | 15.3 | 2.82 |
| Mozambique | 45.6 | 3.98 | 4.4 | 1.56 | 47.5 | 3.96 | 34.1 | 3.78 | 12.9 | 2.62 | 42.4 | 3.88 | 23.2 | 3.64 | 0.4 | 0.05 | 3.2 | 1.33 | 2.1 | 0.12 | 8.3 | 1.83 |
| Namibia | 65.9 | 2.89 | 27.5 | 2.93 | 56.7 | 3.25 | 42.7 | 3.18 | 19.9 | 2.71 | 13.9 | 2.32 | 59.7 | 3.25 | 24.6 | 2.87 | 12.7 | 2.17 | 3.2 | 0.13 | 20.5 | 2.52 |
| Seychelles | 7.8 | 0.01 | 6.4 | 0.00 | 79.2 | 0.05 | 0.0 | 0.00 | 0.0 | 0.00 | 17.6 | 0.01 | 70.8 | 0.05 | 0.0 | 0.00 | 50.8 | 0.03 | 2.3 | 0.00 | 17.1 | 0.01 |
| South Africa | 60.4 | 4.41 | 44.0 | 4.33 | 75.4 | 3.61 | 24.2 | 3.72 | 28.4 | 3.80 | 33.1 | 4.14 | 85.0 | 3.81 | 25.4 | 3.57 | 20.4 | 3.26 | 4.0 | 0.20 | 35.0 | 4.40 |
| Swaziland | 97.6 | 1.08 | 63.5 | 4.27 | 93.5 | 1.92 | 96.2 | 1.71 | 26.6 | 4.20 | 81.1 | 3.09 | 91.4 | 2.30 | 16.8 | 3.18 | 60.0 | 4.18 | 6.3 | 0.11 | 30.3 | 4.04 |
| Tanzania | 94.1 | 1.75 | 74.3 | 3.62 | 67.6 | 3.93 | 70.1 | 4.04 | 5.1 | 1.63 | 37.1 | 4.12 | 27.3 | 3.95 | 14.1 | 2.87 | 17.7 | 3.06 | 4.1 | 0.15 | 69.4 | 3.80 |
| Uganda | 83.3 | 3.26 | 41.6 | 4.40 | 23.9 | 3.77 | 14.6 | 3.12 | 19.1 | 3.37 | 30.3 | 4.13 | 27.9 | 4.01 | 32.8 | 4.16 | 41.7 | 4.37 | 3.2 | 0.20 | 44.7 | 4.45 |
| Zambia | 91.0 | 2.40 | 62.2 | 4.21 | 66.9 | 4.03 | 88.7 | 2.52 | 24.2 | 5.13 | 34.7 | 5.00 | 53.3 | 4.60 | 22.6 | 5.10 | 10.4 | 2.58 | 4.5 | 0.23 | 30.0 | 5.05 |
| Zanzibar | 84.2 | 0.18 | 43.2 | 0.33 | 60.8 | 0.28 | 29.3 | 0.33 | 5.0 | 0.33 | 7.8 | 0.33 | 36.5 | 0.34 | 37.6 | 0.34 | 10.0 | 0.15 | 3.1 | 0.02 | 27.4 | 0.33 |
| Zimbabwe | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | x $\times$ | $\times \times$ | x $\times$ | x $\times$ | x $\times$ | $\times \times$ | $\times \times$ | x $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | x $\times$ | x $\times$ | $\times \times$ | x $\times$ | $\times \times$ |
| SACMEQ II | 68.4 | 0.84 | 45.4 | 0.94 | 62.4 | 0.88 | 44.0 | 0.86 | 17.5 | 0.88 | 38.8 | 0.98 | 62.2 | 0.89 | 20.3 | 0.84 | 26.2 | 0.78 | 3.9 | 0.04 | 28.4 | 0.96 |



## Author Contact

Njora Hungi
UNESCO International Institute for Educational Planning
7-9 rue Eugene-Delacroix, 75116 Paris, France
Email: n.hungi@iiep.unesco.org; hungi05@gmail.com

For more information about SACMEQ, visit website: www.sacmeq.org


[^0]:    Source: SACMEQ Data, 2007

