Introduction

This paper highlights the quality of four primary school inputs in Seychelles in relation to the nation’s defined benchmarks. The four inputs are: basic learning materials, mathematics textbooks, pupil-teacher ratios, and class size. These four indicators are described in the section titled Selected Indicators where it is also shown how they are related to the quality of education. The data used in this paper were collected in 2007 from 1,480 pupils in 24 primary schools in Seychelles and includes the national private school, but not the private French and British schools. All six regions of Seychelles were included in the study. This was part of a major international study known as the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) III Project. The SACMEQ III Project sought to examine the quality of education provided in primary schools in Seychelles and 14 other African school systems.

The results in this paper cover Seychelles as a whole, and are then further disaggregated by region, school location (rural versus urban), and type of school (government versus private). The results from the SACMEQ II Project (2000) are also provided, to enable monitoring the general trend in the provision of the selected inputs in primary schools in Seychelles between 2000 and 2007.

Background

Seychelles has achieved Universal Primary Education (UPE). Net enrolment ratios in primary schools have been 100 percent since 1999 and the proportion of pupils who started Grade 1 and completed Grade 5 was also 100 percent (Ministry of Education (MoE), 2003).

Primary education is provided mainly by government schools, although since 1990 there has been a growth in private sector investment in education. The three private schools are fee-paying and they are not funded by the government. On the other hand, primary education is free of charge in all government schools and funding covers tuition, instructional materials, and textbooks.

The transformation of the education system has been guided by three fundamental principles: Education for All (EFA), Education for Life (EFL) and Education for Personal and National Development (EPND) set out in the policy statement, Education for a New Society, (MoE, 1984). The objectives of that policy statement were then extended to a later document, Education for a Learning Society, to respond to the challenge of equity, quality, and accountability (MoE, 1999). The main thrust of the present reform initiatives is to develop the necessary structures and strategies to further promote qualitative improvement and maintain sustainable provision for “appropriate and meaningful education for all” (MoE, 2010).

The government is also mainly responsible for building new schools, for improving existing facilities, and building new classes. The MoE manages the running of primary schools via individual school heads. However, it controls the facilities, resources, staffing, and budgetary allocation. With the new structure of school governance and with the introduction of school councils, schools are given more autonomy in the administration and organization of the school as a
means of creating an optimal teaching and learning environment.

Selected essential inputs into primary schools, such as basic learning materials and equipment, a comfortable classroom which is not overcrowded, adequate textbook provision, and a sufficient supply of teachers are some of the essential resources from which all pupils should benefit.

The SACMEQ data are very useful for assessing the quality of school inputs based on research evidence, for at least two reasons: Firstly, the data were collected using modern scientific sampling techniques that are known to be reliable. Secondly, since Seychelles is committed to a high level of educational provision and has set very high standards, the SACMEQ monitoring programme provides an opportunity to assess the expectations of the MoE, especially as major reforms are being introduced into the schooling system.

**Selected Indicators**

The four selected indicators of the quality of school inputs are: (a) basic learning materials, (b) mathematics textbooks, (c) pupil-teacher ratios, and (d) class size. The descriptions of these four indicators have been provided in Table 1 below together with the set benchmarks for Seychelles.

Basic learning materials (that is, possession of at least one exercise book, something to write with, and a ruler) are considered crucial to ensure that the pupils participate reasonably in learning activities in the classrooms. Therefore, it is desirable for all pupils to have these materials. A ruler is especially important for mathematics and science lessons, particularly for the upper primary school classes. Likewise, it is desirable for each pupil to have sole use of a textbook (especially for the core subjects, such as reading, mathematics, and science), because research evidence has shown that sole use of textbooks is essential for effective teaching and learning in the classroom. Sole use of textbooks is also preferable, because it enables pupils to undertake academic activities at home, such as doing homework and revising school work.

Concerning pupil-teacher ratios and class size, research evidence shows that lower values are desirable for better quality of education. It is thought that, to a certain limit, lower values on these two indicators are associated with more interaction between teachers and pupils, resulting in better quality education. Pupil-teacher ratios and class size are also key indicators for checking if expansion in participation rates is accompanied by adequate provision of teachers and classrooms.

The recommended class size for primary schools in Seychelles is 30 pupils per class. Although the teacher-pupil ratio is not stated officially, there is a national effort to maintain the ratios at 20 pupils per teacher (MoE, 2000).

<table>
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<tr>
<th>Selected Indicator</th>
<th>Description of the Indicator</th>
<th>National Benchmark</th>
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<tbody>
<tr>
<td>Basic learning materials</td>
<td>Pupil has at least one exercise book, a pencil or a pen, and a ruler</td>
<td>100%</td>
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<tr>
<td>Mathematics textbooks</td>
<td>Pupil has sole use of a mathematics textbook during mathematics lessons</td>
<td>100%</td>
</tr>
<tr>
<td>Pupil-teacher ratios</td>
<td>Total number of pupils in a school divided by number of teachers in the school</td>
<td>20:1</td>
</tr>
<tr>
<td>Primary 6 class size</td>
<td>Average number of Primary 6 pupils per class</td>
<td>30</td>
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**Table 1: National Benchmarks for the Selected Indicators of the Quality of Education**

Key Findings

The data on the four inputs were analyzed and the results are depicted in Figures 1 to 4.

Basic Learning Materials

In 2007, nearly all (98%) Primary 6 pupils had at least one exercise book, a pencil or a pen, and a ruler. This figure is quite impressive. There was basically not much variation among regions or between rural and urban schools. The private school showed the highest percentage (100) where all students reported having these three basic learning materials.

On average, 79 percent of pupils in all the SACMEQ countries had basic learning materials. This implied that the overall situation in Seychelles was far better than most SACMEQ countries. Moreover, between 2000 and 2007, the percentage for Seychelles increased by 11 percentage, hence showing that the situation had improved considerably.

Mathematics Textbooks

The MoE's target is for each pupil to have sole use of a textbook per subject (MoE, 2006). It is, therefore, disappointing that only 63 percent of Primary 6 pupils in 2007 had sole use of mathematics textbooks. It is also worrying that the quantity of these textbooks had dropped since 2000, when the percentage of Primary 6 pupils with sole use of mathematics textbooks was 76 percent. Nevertheless, the textbook situation in Seychelles in 2007 was considerably better than that of the SACMEQ countries (41%).

The Northern (81%) and Eastern (92%) regions recorded the largest percentages of pupils with sole use of these textbooks, while Islands (1%) and Western (52%) recorded the lowest percentages. The textbook situation in rural schools (56%) was worse than that in urban schools (66%). The private school had a much higher percentage of pupils with mathematics textbooks (96%) than the public schools (62%).

Pupil-Teacher Ratios

In 2000, the mean pupil-teacher ratio among primary schools in Seychelles was 17. This mean was well within the country's intended benchmark of 20. In 2007, the mean dropped to 14 pupils per teacher, and therefore, improved remarkably. It is interesting to note that the mean for the private school (11) was even better than the mean for public schools (14). The overall mean for Seychelles was three times as low as the average mean for SACMEQ (43). These results depict a primary school system with a substantial teacher workforce.

In 2007, there were some variations between the regions, but all the mean values were well below the intended national benchmark. The highest mean value was in Southern (18) and the lowest in Islands (12). The pupil-teacher ratios for both urban and rural schools were the same (14).

Class Size

The average number of Primary 6 pupils per class had decreased from 27 in 2000 to 25 in 2007. This number was well within the set national benchmark of 30 and better than the SACMEQ mean of 46 pupils per class in 2007. Remarkably enough, the number for the private school was exactly the same as that for public schools (25). There were minimal variations among the six regions, with the highest mean in the Eastern and Western regions (27 for both) — hence, well within the national benchmark — and the lowest in the Northern and Southern regions (23 for both). The mean for urban schools (25) was just slightly lower than that for rural schools (26).
Figure 1: Percentages of Primary 6 Pupils with Basic Learning Materials in Seychelles

- National Benchmark: All primary school pupils in Seychelles are expected to have basic learning materials (100%)

Figure 2: Percentages of Primary 6 Pupils with Sole Use of Mathematics Textbooks in Seychelles

- National Benchmark: All primary school pupils in Seychelles are expected to have a mathematics textbook (100%)

Figure 3: Average Pupil-Teacher Ratios among Primary Schools in Seychelles

- National Benchmark: 20 pupils per teacher in primary schools

Figure 4: Average Numbers of Primary 6 Pupils per Class in Seychelles

- National Benchmark: 30 pupils per class in primary schools

Sources of Figures 1 to 4: SACMEQ Data Archive
**Summary of Findings**

This study showed that nearly all pupils in Seychelles had all the three basic learning materials needed for effective participation in classroom activities. However, around one-third of the pupils did not have sole use of mathematics textbooks. Most of the pupils without sole use of mathematics textbooks were in the public schools. The regions showing the lowest percentages for sole use of mathematics textbooks were Islands and Western.

This study also revealed that the mean pupil-teacher ratio (14) in 2007 was well within the intended benchmark for Seychelles of 20 pupils per teacher. Moreover, in all the educational regions the average numbers of Primary 6 pupils per class were well within the national benchmark of 30.

**Suggestions**

Regarding the problem with the provision of mathematics textbooks in primary schools, the following policy options could be considered.

The MoE, through the newly created Centre for Curriculum, Assessment and Teacher Support (CCATS) should:

1. Audit all public primary schools to determine the quantity and allocation of textbooks.
2. Review the procedures for the procurement and distribution of textbooks. Guidelines for the procurement and allocation of textbooks have been produced (MoE, 2006). However, the extent to which the procedures are followed needs to be re-examined.
3. Establish record-keeping and handing-over procedures.
4. Set up an accountability system to ensure that established procedures are adhered to.

**Conclusion**

This policy brief highlighted the quality of primary school inputs in Seychelles using four indicators, namely: (a) basic learning materials, (b) mathematics textbooks, (c) pupil-teacher ratios, and (d) class size. Against the country’s own set benchmarks, Seychelles scored very well in the provision of basic learning materials and extremely well on pupil-teacher ratios and class size.

However, the country’s score on mathematics textbooks was disappointing. Nevertheless, the situation in private schools was much better than that in public schools. There was an overall decline in provision of these textbooks for Seychelles between 2000 and 2007.

It is clear from the findings that the MoE had been quite successful in ensuring that basic learning materials were available; that the pupil-teacher ratios remained low; and that class size was reduced. However, the distribution of textbooks seems to be an issue that must be addressed urgently. It is anticipated, that with the new school governance structure and with greater autonomy, schools will exercise more control over the procurement, distribution, and management of textbooks.

**References**


**Abbreviations and Acronyms**

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CCATS</td>
<td>Centre for Curriculum, Assessment and Teacher Support</td>
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<td>EFA</td>
<td>Education for All</td>
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<tr>
<td>EFL</td>
<td>Education for Life</td>
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<tr>
<td>EPND</td>
<td>Education for Personal and National Development</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<td>UPE</td>
<td>Universal Primary Education</td>
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