



Southern and Eastern Africa Consortium for Monitoring Educational Quality

Quality of Primary School Inputs in Malawi

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Introduction

This paper highlights the quality of four primary school inputs in Malawi 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 2,781 Standard 6 pupils in 139 government primary schools in all six education divisions in Malawi. 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 Malawi and 14 other African school systems.

The results in this paper cover Malawi as a whole, and are then further disaggregated by division and school location (rural versus urban). 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 Malawi between 2000 and 2007.

Background

In 1994, Malawi introduced Free Primary Education (FPE) in an effort to realize Universal Primary Education (UPE) and to attain the Education for All (EFA) goals. As a result, all fees were waived in all government (public) primary schools, which meant that no child, especially from poor families, would be denied access to primary education, because of an inability to pay school fees. Before the

introduction of FPE, schools were responsible for collecting funds from parents for learning materials and other operational expenses, while the government was mainly responsible for the salaries of teaching staff. In addition, schools were allowed to recruit extra teachers (paid by parents) to cater for shortages.

However, under the FPE policy, primary education is funded mostly by public resources (92% of the total cost). The remaining eight percent comes from private financing, which includes contributions from communities, community-based organizations, religious bodies, non-governmental organizations, (NGO) and parents. Public primary schools receive between 500 United States dollars (US\$) and US\$1,000 from the government under the Direct Support to Schools (DSS) initiative to cater for teaching and learning materials (World Bank 2010). Starting from the 2010/11 financial year, the DSS is gradually being phased out and is being replaced by a Primary School Improvement Programme (PSIP). The PSIP is based on expenditure per learner and has a target of US\$6.58 per pupil to be achieved by 2014. Public primary schools also receive support from the Other Recurrent Transactions (ORT) funding, through the Local Government Financing Committee (LGFC), based on: pupil-teacher ratios, the distance of a school from the District Education Office, and enrolments. ORT caters for day-to-day and minor expenses, such as utility bills, and the procurement of additional instructional materials.

Resources at school level are prioritized and managed by School Management Committees (SMC) elected at Parent-Teachers Association (PTA) meetings. SMCs are responsible for submitting school improvement plans to the district planning structure

at the District Assembly through Village Development Committees.

Construction of new schools and classrooms is mainly done with funding support from development partners and contributions from the communities. Donor support has over the years accounted for over 80 percent of the total development budget. Over 60 percent of donor support goes to construction in primary education. Decisions on construction of new schools and classrooms are done at national level based on district education plans. At the school level, the construction of additional classrooms is also done through contributions from community-based organizations, NGOs and community members.

The supply of textbooks to schools occurs at central level. The policy of textbook provision according to the Draft National School Textbook policy of 2006 is to allocate one textbook per learner for each subject taught, and replacement is supposed to be done every three years. Information on the situation of textbooks in schools is collected from the District Education Offices and schools through the Education Management Information System (EMIS). Textbook needs per school are computed from the data. The distribution of textbooks to the schools is done through the District Education Offices and is monitored by the Supplies Unit. There are challenges associated with the distribution chain (from the central office to the schools and within schools themselves) that have to do with poor accessibility of some schools, hoarding of books by some managers and teachers for various reasons (including the lack of care of books by pupils and

fear of future shortages). Some of the books meant for public primary schools find their way into private schools depriving the public schools. Private schools are not allocated textbooks.

The introduction of the FPE policy resulted in a high influx of new pupils into schools, putting pressure on existing resources (Ministry of Education, Science and Technology (MOEST), 2001). Consequently, there have been concerns that the quality of primary school inputs in Malawi is below Malawi's own set benchmark. In particular, there have been concerns regarding congestion in classes, high-pupil teacher ratios, and insufficient learning materials. Most of these concerns, however, are based on anecdotal evidence.

The SACMEQ data are ideal for examining the quality of primary school inputs in Malawi, for at least two reasons. Firstly, the data were collected using modern scientific sampling techniques that are known to be reliable. Secondly, the data are available for two time points (2000 and 2007). This made it possible to monitor the quality of school inputs in Malawi over time.

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 Malawi.

Table 1: National Benchmarks for the Selected Indicators of the Quality of Education

Selected Indicator	Description of the Indicator	National Benchmark
Basic learning materials	Pupil has at least one exercise book, a pencil or a pen, and a ruler	100%
Mathematics textbooks	Pupil has sole use of a mathematics textbook during mathematics lessons	100%
Pupil-teacher ratios	Total number of pupils in a school divided by number of teachers in the school	60:1
Standard 6 class size	Average number of Standard 6 pupils per class	60

SOURCE: MOEST, 2008.

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 (Standards four to eight). 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 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 pupil-teacher ratios and class size for primary schools in Malawi are 60 pupils per teacher and 60 pupils per class, respectively (MOEST, 2008).

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, only 73 percent of the Standard 6 pupils had at least one exercise book, a pencil or a pen, and a ruler. In other words, close to one in every three pupils (27%) did not have all the three basic learning items that were considered necessary for effective participation in classroom activities. There were no great variations among the divisions, but South West recorded the lowest percentage of 67 percent. In addition, there was a difference of 11 percent

between pupils in rural schools (70%) and pupils in urban schools (81%).

On average, 79 percent of pupils in all the SACMEQ countries had basic learning materials. This implied that the overall situation in SACMEQ countries was generally better than of Malawi. Between 2000 and 2007, the percentage for Malawi increased by 18 points, which meant that the situation had improved.

Mathematics Textbooks

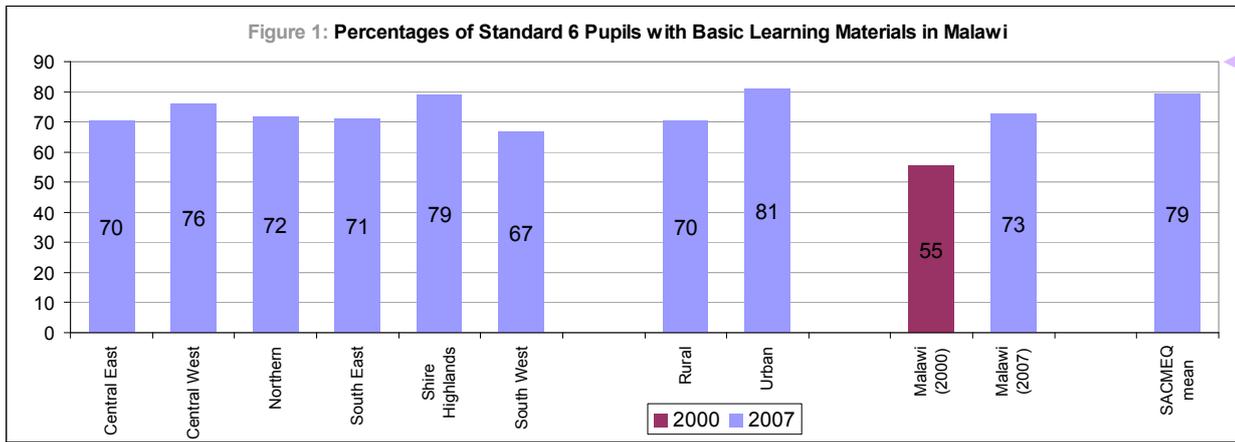
The government's target is for each pupil to have sole use of a textbook per core subject. It is, therefore, worrying that only 24 percent of the Standard 6 pupils in 2007 had sole use of mathematics textbooks. It is also troubling that the quantity of these textbooks dropped considerably since 2000, when the percentage of Standard 6 pupils with sole use of mathematics textbooks was 57 percent. Furthermore, the textbook situation among SACMEQ countries in 2007 (41%) was generally better than the situation in Malawi.

Apart from Central West and South East education divisions – which recorded the largest percentages of pupils with sole use of these textbooks (30%, for both) – there were no large variations among the other divisions. The textbook situation in rural schools (27%) was better than that in urban schools (16%).

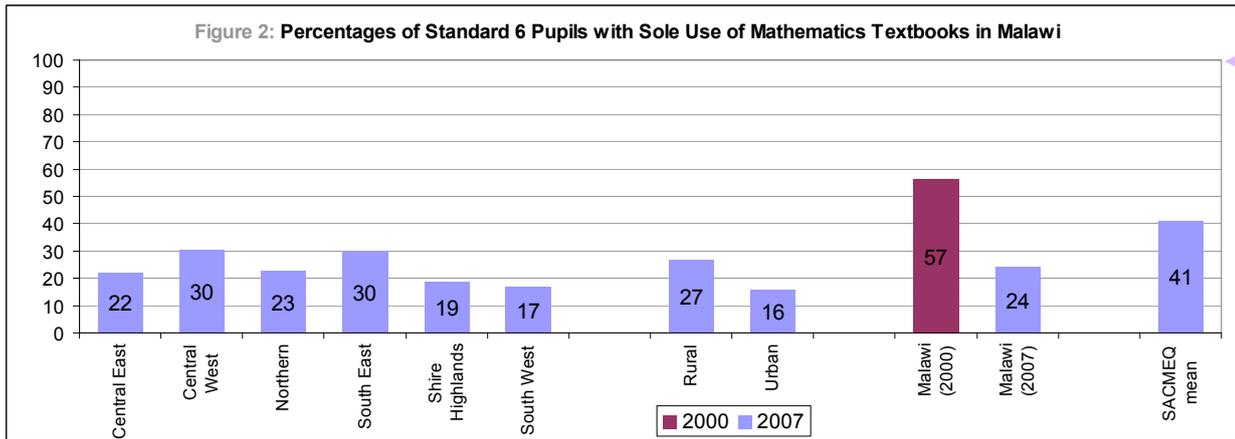
Pupil-Teacher Ratios

In 2000, the mean pupil teacher ratio among primary schools in Malawi was 70. This mean was above the country's set benchmark, which is 60. However, in 2007 the pupil teacher ratio increased to 88 pupils per teacher, and thus the average was far above the set target. This implied that the increase in pupil enrolments between 2000 and 2007 was not accompanied by an increase in the supply of teachers, or that most teachers who left the service during this period were not replaced.

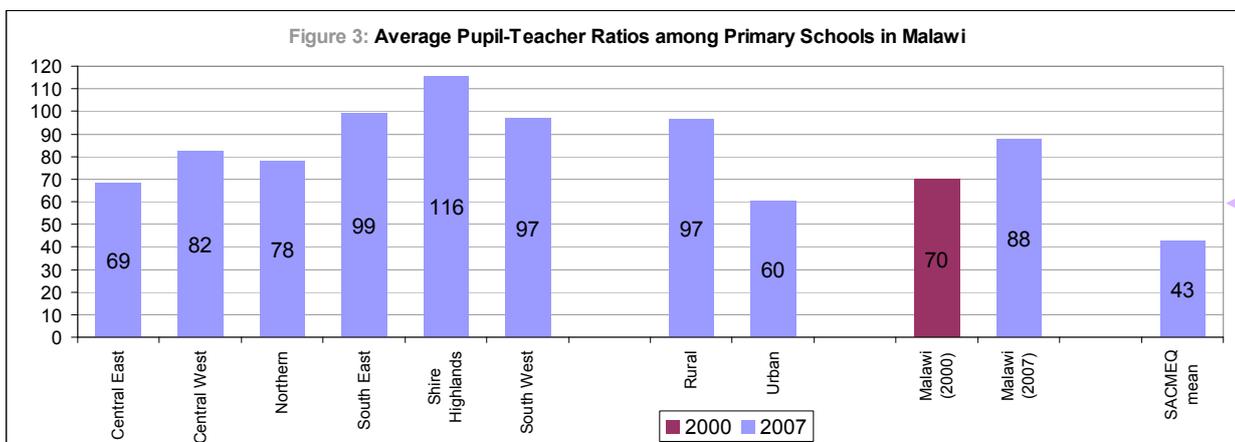
In 2007, none of the divisions had mean values within the national benchmark. The mean values were worst in Shire Highlands (116), followed by South East (99) and South West (97). Furthermore, there was a big difference between the mean values of pupil-teacher ratios for schools located in towns (60) and those for schools located in rural areas (97).



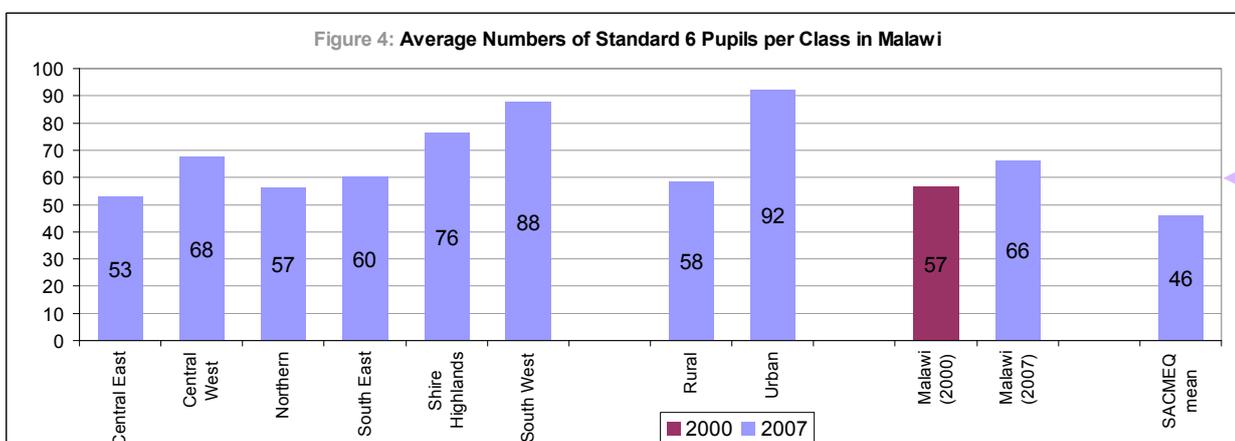
National Benchmark: All primary school pupils in Malawi are expected to have basic learning materials (100%)



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



National Benchmark: 60 pupils per teacher in primary schools



National Benchmark: 60 pupils per class in primary schools

SOURCES of Figure 1 to 4: SACMEQ Data Archive.

Class Size

From Figure 4, it can be seen that, in 2000, the average number of standard 6 pupils per class among primary schools in Malawi was 57. This number was within the country's set benchmark of 60. However, in 2007, the number had risen to 66 pupils per class, and thus the number was no longer within the set benchmark. Nevertheless, the number for rural schools (58) was within the set national benchmark, and much better than the number for urban schools (92). The overall number for SACMEQ (46) was much lower (hence, better) than the number for Malawi.

Except in three divisions (Central East, Northern, and South East) where the numbers of Standard 6 pupils were within the set national benchmark, the numbers of all the other three divisions exceeded the set national benchmark. However, this did not mean that there were no classes that were larger than 60 in Central East, Northern, and South East divisions. South West (88) recorded the worst number, and on average, the numbers of Standard 6 pupils in this division exceeded the national benchmark by 28 pupils.

mean number of Standard 6 pupils per class exceeded the benchmark by 32 pupils.

Suggestions

Regarding the problems with the provision of basic learning materials and textbooks in Malawian primary schools, the following policy options could be considered.

1. The Supplies Unit within the Ministry of Education should take the lead, in collaboration with the Department of Basic Education and the Department for Inspectorate and Supervision, to intensify efforts in supplying basic learning materials. They should also monitor the distribution and utilization of these learning materials. Particular attention should be given to the types of materials supplied (by subject) to ensure an adequate and balanced supply.
2. The Department of Basic Education should move fast in decentralizing the procurement and distribution of textbooks to the districts and schools through, among others, speedy and effective implementation of the Primary School Improvement programme. The procurement and distribution of teaching and learning materials should ideally be done at the school level. This entails developing the necessary management capacities at school and district education levels.
3. Concerning the need to improve pupil-teacher ratios and class sizes in Malawian primary schools, the Ministry of Education, through the departments of Basic Education and Human Resources should reinforce the government's on-going efforts to deploy more teachers to rural schools by, among others, developing a teacher deployment strategy and work plan with clearly set implementation targets.
4. The capacity of the teacher training institutions in Malawi is too small to meet the required numbers of qualified teachers in the short term. The ministry, through the Education Sector Implementation Plan, is implementing measures, such as, the introduction of parallel and distance modes of training, the provision of hardship allowances to teachers working in

Summary of Findings

- This study showed that around one in every three Standard 6 pupils in Malawi in 2007 did not have all the three basic learning materials needed for effective participation in classroom activities. Most of the pupils without the basic learning materials were in rural schools, but substantial numbers were in urban schools. Furthermore, over three-quarters (76%) of the pupils did not have sole use of mathematics textbooks.
- This study also revealed that the mean pupil-teacher ratio (88) exceeded Malawi's benchmark of 60 pupils per teacher. The mean pupil-teacher ratio was particularly bad for rural schools (97).
- Moreover, this study showed that the average number of Standard 6 pupils per class (66) exceeded the national benchmark of 60. However, in three divisions (Central East, Northern and South East), the average numbers of Standard 6 pupils per class were within the national benchmark of 60. In urban schools, the

remote areas, and reallocating primary- school-trained teachers from the Community Day Secondary Schools (CDSS) to primary schools. In addition to these measures, it is suggested that the ministry should seek ways of enhancing the programme of engaging more qualified, volunteer teachers through partnerships with development partners such as: the Peace Corps, the Voluntary Service Overseas (VSO), the Japan International Cooperation Agency (JICA), and others.

5. The MOEST should implement the double-shift system of school classes, so as to overcome the problem of high pupil-classroom ratios, which grew worse between 2000 and 2007, especially in urban schools. In this regard, to move from rhetoric to action, the Department of Basic Education, in partnership with the Human Resource Department, the District Education Offices, and the schools, should conduct an assessment and develop an action plan for schools that would effectively implement the double-shift system. Lessons could be drawn from those schools currently implementing the double shift.

Conclusion

This policy brief highlighted the quality of primary school inputs in Malawi 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, Malawi scored poorly in all four indicators, most especially in the provision of mathematics text books and teachers. In general, there has been an increase in the provision of basic learning materials in Malawi between SACMEQ II and SACMEQ III, but the levels are still far below the set benchmarks. Disparities exist between urban and rural schools with rural schools being more disadvantaged than urban

schools, except in the provision of mathematics textbooks and class size.

Although some progress was noted in the overall provision of basic learning materials in Malawi between 2000 and 2007, more effort is needed, because Malawi still fell below the SACMEQ mean in 2007. Malawi should also intensify efforts to improve the pupil-teacher ratios and the distribution of resources between urban and rural schools. These findings require that the relevant departments of the Ministry of Education, mentioned in this brief, should work diligently and intensify the implementation of the policy guidelines on resource allocation, as outlined in the National Primary Education Sector Plan 2008-2017 (MOEST, 2008).

References

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Abbreviations and Acronyms

CDSS	Community Day Secondary Schools
DSS	Direct Support to Schools
FPE	Free Primary Education
EFA	Education for All
EMIS	Education Management Information System
JICA	Japan International Cooperation Agency
LGFC	Local Government Financing Committee
MOEST	Ministry of Education, Science and Technology
NGO	Non-Governmental Organization
ORT	Other Recurrent Transactions
PSIP	Primary School Improvement Programme
PTA	Parent-Teachers Association
SMC	School Management Committee
UPE	Universal Primary Education
VSO	Voluntary Service Overseas

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