The Quality of Education in Tanzanian Primary Schools: An Assessment of Physical Facilities and Teaching Learning Materials

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Introduction

The major aim of giving education to all Tanzanians is to provide them with a concrete and reliable basis for a self-reliant life. The education that can be guaranteed to all in Tanzania is primary education. Since independence in 1961, education has always been seen as the core of national development, although rapid expansion—especially of primary schools—came after the 1974 Universal Primary Education (U.P.E.) programme. (The Musoma Declaration). For instance, Roy Carr-Hill (1984:32) noted that there were 9,947 primary schools in 1981 compared to 4,133 primary schools in 1971, which is double the figure of primary schools in just over a period of 10 years. The position at the end of 1986 was that there were 3,160,504 pupils in 10,173 primary schools, which represented 86% of all the children who had reached the age of going to school. (Ministry of Education, Budget Speech for 1987/88).

The enormous expansion of primary school education in Tanzania clearly has many implications. For instance;

- (a) How has the rapid expansion affected the teaching and learning in the schools?
- (b) How have the new U.P.E. schools managed in areas where the school tradition was poor?
- (c) Are the minimal resources necessary for successful teaching available in the schools?

The major aim of this paper is to give an assessment of materials and physical facilities situation in Tanzanian primary schools, in trying to answer whether or not the minimal resources for successful teaching are available in the schools. The paper is mainly based on a review of current research reports.

The conceptual framework

In attempting to understand what factors are most important in affecting students learning which are reflected in a students school achievement, most investigators

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tend to look at variables pertaining to the school and teacher characteristics. For instance, Sanguinetty (1983) suggested that in order to determine the quality of an individual school, it is usual to observe the facilities of the schools and the characteristics of the teaching qualifications, data on pupil achievement, access to reading materials or textbook availability, the class size, teacher-student ratios, size of staff, location of the school, etc. However, in developing countries the major proportion of explained achievement variance is due to the school characteristic and the teacher quality (Heyneman and Loxley 1983). The poorer the country is economically, the more impact on achievement the school quality and teachers seem to have.

Ndabi (1985) investigated the relationship between selected student background, school characteristics and academic achievement in standard seven primary school students in Tanzania, and found out the following when he considered resource/instructional materials:

- (a) students' performance on primary seven leaving examination (PSLE) tended to be better in schools experiencing less frequent shortage of exercise books,
- (b) students who had the requisite textbooks in all the subjects taught tended to have better performance than students in schools with relatively high incidence of text-book shortages.

In his conclusion he argued that the school structure as defined by his study—i.e., student population, staff, school facilities, teacher characteristics and instructional materials as commonly used in school settings for teaching/learning purposes—account for more than other variables in determining students performance in the PSLE.

Education is costly and its success depends very much on the general development of the economy, of which Tanzania does not boast to have a healthy one. The massive expansion of primary education only means that the resources available have been spread very thinly, and therefore it is worth to look at the quality of education that has resulted. In this study the determinants of quality shall centre on the facilities available at the schools as argued by Ndabi (1985).

The source of resources for primary education

Local governments which were reintroduced a few years ago as a result of

administrative reforms in the country are now responsible for planning and administration of community activities such as primary education, adult education, health and infrastructure. These activities are financed by local tax revenues, and central government subsidies. The building of primary schools is financed through village self-reliance; furniture and teaching materials by the districts; while teachers' training and salaries are provided by the government. Difficulties in raising funds through local tax and the fact that education has to share this revenue with health, water and infrastructure, means that many districts have difficulties in paying for teaching materials.

For instance, during the 1984/85 financial year, local governments were not able to reach the expected target for collecting local revenue, and thus the central government had to increase its subsidies. These financial problems delayed many activities. In the educational sector, the local government had problems of purchasing books and teaching materials. This caused a chain reaction where already printed books were piled up in the stores, and printing programmes could not be implemented. Serious debt problems between local governments, book distributors, printers and publishers arose. The consequences were detrimental to the whole process of education (Annual Joint Review of Swedish support to Education and vocational training 1985:2).

The development budget and recurrent budget for education is financed by the Tanzanian government with assistance of foreign donors. Table 1 gives a breakdown of the sources of finance.

The major donors of educational finance to the government of Tanzania are Sweden, the World Bank and Denmark, without whose assistance there would be very serious problems.

Immediate post-UPE and current primary schools situation

In their survey of Universal Primary Education in Tanzania, Omari *et al* (1983) report that by January 1978, the programme of UPE had began to show some signs of stress. Classrooms which were designed to serve 45 pupils were serving 80 or more pupils, children were attending classes under trees and sitting on the ground, newly constructed classrooms were falling apart due to poor construction or lack of adequate resources to put up strong structures, and some classrooms were small and hazardous. At the end of 1978, of the 48,217 classrooms required, only 36,860 had been completed; and of the 49,567 teachers' houses required, only 14,567 had been completed, thus forcing some teachers to live in shanties.

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Financial Year	SOURCE FUNDS BY % OF TOTAL BUDGET								
(T.shs.mill)	Tanzania	Sweden	Denmark	Swiss	IDA	Norway	Others		
1980/81 (245.319)	28.8%	34.2%	11.6%	5.7%		4.1%	10.4%		
1981/82 (300.753)	20.4%	26.3%	19.9%	FGR 11.4%	8.0%	3.5%	10.2%		
1982/83 (217.155)	22.1%	30.2%	17.0%	6.0%	17.3%		7.4%.		
1983/84 (288.150)	35.5%	19.2%	14.0%	-	23.9%	-	7.4%		
1984/85 (421.301)	32.7%	15.0%	14.9%	-	23.5%	3.9%	10.0%		
1985/86 (525.769)	28.6%	19.5%	8.2%	Swiss 3.9%	22.6%	6.0%	10.3%		

Table 1: Major Sources of the Development Budget of the Ministry of Education

Source: United Republic of Tanzania Annual Budget Estimates 1980/81 - 1985/86 and quoted in Annual Joint Review of Swedish support to Education Coc. Training 1986. Appendix IV.

The Ministry's primary school sub-sector review in a stratified sample of 170 schools which was conducted in 1981, revealed that whilst there were usually one or two staff homes attached to each primary school, only 21% of the teaching staff lived in staff houses, and this included sharing quarters. There was an average of 100 pupils to a toilet hole, compared to a recommended health standard of one toilet hole per 25-50 pupils. The average number of pupils per desk was around 4, with overcrowding in the lower classes especially the UPE cohort (Carr-Hill 1984:34). Usually it was the lower classes which studied under

difficult conditions such as having classrooms without desks, or shifting from one impoverished classrooms to another.

Up to the time of writing this paper, most of the schools which were built on self-help scheme by parents have deteriorated or remained the same as when constructed. The majority were built by mud bricks and were not plastered. Some did not have window shutters, floors, doors or desks, and to-date they have undergone no improvement. Roofing materials, chiefly iron sheets, were provided by the Government, but wood for constructing trusses and rafters had to be the responsibility of the local communities. Most of these had to be constructed using poles and locally available wood without any treatment to prevent attack by termites and wood borers. The outcome now is that some of these materials have been attacked and plunks of wood have fallen off. Because of poor workmanship, in some schools roofs have been blown off by wind or have come down during heavy rainfall.

Once constructed, especially in the villages, schools have been left under the charge of the village council. Mobilization of resources and improvement of the school rests particularly with the chairman of the village council, whose initiative and dynamism can enhance the progress of the school. The schools differ a great deal depending on where they are located. Those located in areas endowed with good agriculture and better income for parents seem relatively better.

However, in the same sub-sector review, it was shown that on the average, each pupil used two exercise books per subject per year, whilst the Ministry recommends three. The supply of textbooks was inadequate in all the subjects in all grades, and in science subjects they were even fewer. A typical example is exemplified by a study on primary schools in Tanga region, carried out in January and February 1985, by a group of Tanzanian Regional Statistical Officers. Among other things, the group looked at pupil-textbook ratio in several subjects, and in different areas in Tanga. Table 2 is a good example of their findings.

The Coast had an extremely high ratio of 45 pupils per book for science books: approximately one book per stream.

It is not unusual to find a stock of newly produced textbooks at the Regional or District Education office not yet distributed to the schools or unused textbooks in a school. This was borne out in a study conducted by the Department of Education of the University of Dar es Salaam on "Primary School Text Books in Tanzania: An evaluation of their Quality; April, 1987". This can happen for a number of reasons other than the typical complaint of the

Table	2:	Pupil-book	Ratios
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Subject	Lowland	Coast	Highland
Mathematic	s 4	5	5
English	4	5	3
Science	15	45	33
Kiswahili	3	5	4
Geography	11	24	21
History	6	6	9

for Different Areas and Subjects

Source: Hans Petterson and Alf Fyhrlund - Summary and comments on study on Primary Schools in Tanga, 1985 p. 16.

lack of transport for distribution. In a situation of inadequate or uncertain supplies, a headmaster or village education coordinator may reasonably keep a reserve of books, or teachers trained to teach with one set of textbooks may be reluctant to experiment with new ones before they become thoroughly conversant with them. In the case of Tanga, as was later found out, there was no enough money given by Municipality to pay for enough books for the schools. However, it was also learnt that some of these books were secretely being sold privately in shops, and not officially available for sale in shops. There was therefore a mystery sorrounding what happened to the books in Tanga.

With the pronouncement of UPE, it meant that new books had to be written to meet the need for the increased population of students. Leaving aside the financial aspect of it (which Tanzania has been extremely lucky to find a donor) textbook production and distribution is a very complicated process. A textbook and a teacher's guide takes its beginnings at the Institute of Curriculum Development (ICD) which prepares manuscripts according to the syllabus. Manuscripts are supposed to be tested before they are sent to the Ministry for approval. The Ministry then places the books with a publisher—either the Tanzanian Publishing House (TPH) or the East African Publishers Ltd. (EAPL). These in turn ask for printers quotations from either Printpak or the National Printing Company (KIUTA), both of which belong to the parent parastatal, Karatasi Associated Industries. Since the book is produced using paper and other materials granted to the Ministry by the donor agent, SIDA, the printers price does not include such costs.

When the publisher receives the printed book, he adds a 30 percent mark up, before selling it to the sole distributer of primary school materials, Tanzania Elimu Supplies (TES). TES adds another 20 percent of the printers' price before distributing the books to the local government godowns, where they are sold to the District Education officers, who then finally distribute the books to the schools.

There are several problems in this chain, including late manuscripts, cumbersome editing, time-consuming procurement, technical obstacles to printing, storing and distribution. However, the greatest problem is financing all the transactions, which ultimately have to be borne by the districts. The districts pay TES, TES pays the publisher and the publisher pays the printer. (The Institute of Curriculum Development is financed by the Ministry). When the districts have not, as in many cases, been able to pay for the books, TES, the publisher and printer run into debts.

Exercise books are produced and distributed by TES, who for this purpose receives paper and other necessary materials through SIDA financed imports. TES then sells the exercise books to the districts. Until very recently, all the paper for book production was imported and paid for by SIDA, but now school books are printed on locally produced paper bought at export price from Southern Paper Mills (SPM) Mufindi, through Swedish direct funds.

Until May 1987, the Ministry had been able to print and distribute 21 titles of of primary school textbooks totalling 3,650,393 copies, and a total of 15,960,000 exercise books (1987/88 Ministry of Education Budget Speech). The annual demand for primary schools exercise books stood at 108,000,000 copies, while the Ministry was only able to produce 20,000,000 copies per annum. This was a very serious shortage. The bottlenecks involved in the distribution and selling of the textbooks and exercise books have been lessened somehow by the government enacting a policy whereby TES will no longer be the sole agent for the printers. Likewise the buyer must not necessarily be the District Education officers solely; other people such as private individuals and parastatals may sell textbooks and exercise books as long as they can prove that they will be able to deliver them to the client.

What has now developed is that parents have realized that schools can no longer provide all that is needed in terms of textbooks and stationery. Also, headteachers are no longer entirely looking upon the District Education Offices for the supply of these items. Many are appealing to parents to provide their children all possible support in terms of textbooks and stationery. The outcome of this is that children coming from relatively well-to-do families have a better access to educational facilities, and therefore it can no longer be claimed that all children have an equal opportunity in primary school education, although education is claimed to be universal.

The Ministry of Education, however, has not given up hope in terms of finding better and efficient means of handling the issue of textbooks and exercise books. It has of late established a special unit, Book Management Unit (BMU) to coordinate and supervise all book production and distribution activities (Ministry of Education Budget Speech 1990/91). As an outcome of this, during the 1989/90 Financial year the Ministry of Education was able to produce 25 out of 31 titles of textbooks which were required, with a total of 3,400,000 copies. Also, it produced 26,000,000 exercise books: an average of 8 exercise books per pupil.

As far as the problem of desks is concerned, many children still sit on the floor or stand up because of the shortage. Up to the time of delivering the 1990/91 budget speech of the Ministry of Education, there had not been a comprehensive assessment of the desk situation in primary schools. It was however reported that people had taken the shortage of desks in schools as a big challenge, and that tremendous effort had been initiated to reduce the problem. Similarly, a lot of initiative by parents, local communities, charity organisations and the government had gone into trying to solve the problem of shortage of classrooms and teachers' houses. Although this problem was far from being solved, nevertheless the effort was commendable. Other factors militating against the quality of education in primary schools apart from desks, classrooms, textbooks and exercise books were the shortage of well qualified teachers, poor remuneration and incentives to teachers, compactness of the curriculum, poor living conditions for most teachers and inadequacy or absence of resource materials for teaching and learning in the schools.

A considerable number of primary school teachers are primary school leavers themselves who have attended teacher training course for a period not exceeding two years. Some of these have been trained through a residential training programme, while others went through what is called Distant Teacher Training programme. These teachers have a low level of education, and are expected to teach any subject in the primary school curriculum. Many of these teachers are handicapped in terms of the level of awareness, experience and academic rigour. The Ministry has constantly made efforts to upgrade this group of teachers through in-service programmes, but the problem is still far from being solved.

As regards incentives and remunerations, this is still a big problem despite efforts made by government to make the teaching profession more attractive.

Generally incomes of people in Tanzania area very low, and nearly every individual tries to do something on the sideline to try to make ends meet. Often the practice in primary schools is for teachers to bring things to school to sell, and sometimes a lot more interest is devoted to this sideline activity than the teaching to the extent that it interferes with teaching. While teachers should spend their free or spare time preparing lessons and planning what to teach, much of this time is spent on planning how to survive. This inevitably affects the quality of teaching and school performances. Again, the poor accommodation of most teachers affect their professional development. A good decent room conducive to reading in the evenings will cost a rent which a teacher cannot pay on a salary. The low level of incomes forces teachers to live in poor accommodation, eat poorly, and dress shabbily to an extent that people look down at the teaching profession.

In addition to these major limitations, the curriculum of primary schools is very tight with very many subjects, including: English, Kiswahili, Geography, History, Siasa, Science, Mathematics, Domestic Science, Agriculture, Sports, Music, and Religion. All these subjects have to be accommodated within the timetable of five days of teaching per week. Such compactness suggests that everything can only be taught lightly. The finances available are also not enough to buy the support materials like audio visual aids, posters, models, etc., which would make teaching and learning easy.

Because of these big problems associated with the sudden increase of student population due to UPE, there are some problems which have not even been given sufficient attention since the economy did not grow that fast to cope with the situation. For example, schools need special rooms or facilities for teaching science, geography, models for teaching maths, audio visual aids for teaching children in order to form concepts properly, games kits for physical development of the childrens' bodies, etc. In the absence of many facilities and presence of such huge problems, it is clear that the education that can possibly be given is of a very inferior kind. These scarcities and shortages, coupled with teachers who have very low education (Std. VII leavers), and who are illmotivated—because of the difficult teaching conditions, means that it will take a long time before the country is able to offer a high quality education.

It is evident that the quality of the buildings, the teaching and learning materials, the working conditions of the teachers, and even the environment of learning do not portray a picture that good quality education can be provided in the majority of the Tanzanian primary schools. And yet primary education is what Tanzania claims to afford to all its citizens, which is the foundation that the

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country's future supply of manpower to develop the country rests. The challenge remains whether, under such conditions, Tanzania is providing the opportunity for the brainpower of its young generation to develop. Nations have become great because of the development of brainpower of its people. The question is, has Tanzania invested properly in the education of its people?

Perhaps it is not numbers that matter but the quality of the education and the resources which are channelled into education to make it a quality education. The amount of money going into primary education is very low, and this is borne out by the observation on the quality of the primary schools and the great limitation on the teaching and learning materials. Tanzania is not rich, but it can set its priorities differently which can improve resource allocation to primary education. It is necessary to realize that good education is an investment whose returns will not be immediate, but will in the long run pay very handsomely. Tanzania has therefore to fund primary schools education much better if primary education is to remain the best education it can afford to offer to the majority of its citizens.

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