Restoring Teacher Dignity

Volume I: Learner Outcomes, TDMS, and the 2010/11 Budget

November 2010



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HakiElimu P.O. Box 79401 Dar es Salaam, Tanzania Tel: (255 22) 2151852/3 Fax: (255 22) 2152449 Email: info@hakielimu.org Website: www.hakielimu.org

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List of Acronyms

| CSO | Civil Society Organization | | | | |
|----------|--|--|--|--|--|
| DP | Development Partner | | | | |
| MoCDGC | Ministry of Community Development, Gender, and Children | | | | |
| MoEVT | Ministry of Education and Vocational Training | | | | |
| MoFEA | Ministry of Finance and Economic Affairs | | | | |
| NBS | National Bureau of Statistics | | | | |
| PEDP | Primary Education Development Programme | | | | |
| PETS | Public Expenditure Tracking Survey | | | | |
| PMO-RALG | Prime Minister's Office - Regional Administration and Local Government | | | | |
| SEDP | Secondary Education Development Plan | | | | |
| TDMS | Teacher Development and Management Strategy | | | | |
| TPR | Teacher-Pupil Ratio | | | | |
| TRC | Teachers' Resource Centres | | | | |

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1. Introduction

As the development of Tanzania moves forward, the role that each and every citizen has to play in the process is becoming more and more apparent. As we look across families, communities, and the nation, we see how much we depend on each other for the greatest prosperity of all. Through unified, collective efforts we achieve more than we could as individuals. The government has been established by the people as part of these collective efforts. It is an institution created to help guide the common good, an institution that citizens have deemed necessary to coordinate their mutual efforts as they work together towards a brighter future.

One of the key tools that citizens of a representative government create to achieve their common goals is the national budget. The budget has been called "the most important economic policy instrument for governments" that "reflects a government's social and economic policy priorities more than any other document" (Shapiro, 2001). The budget is a guide that helps efficiently transform funds into improvements in service delivery, such as safer drinking water, more reliable health services, and better roads.

Though improvements in any social sector lead to developments in others, the underlying foundation of all personal and collective progress, development, and liberation is education. And just as the budget has implications on social services such as water, health, and infrastructure, so it does on education as well. These implications are not merely in terms of material progress such as schools constructed, books bought, and exams administered. They potentially translate into the real desired results of education—learner outcomes by which children, community members, and citizens attain the capacities to think critically, solve complex problems, and discover creative solutions to propel communities and the nation forward.

1.1 Improving Learner Outcomes

The following is an analysis on how to improve these learner outcomes by adjusting certain budget mechanisms. The key solutions identified are:

- 1) Provide incentives for teachers posted in remote schools.
- 2) Upgrade licensed and paraprofessional secondary school teachers.
- 3) Ensure opportunities for professional growth through in-service training.

While based on a variety of research, these solutions are primarily derived from a public expenditure tracking survey (PETS) that was commissioned by the Ministry of Education and Vocational Training (MoEVT) together with representatives from the Ministry of Finance and Economic Affairs (MoFEA), the Prime Minister's Office – Regional Administration and Local Government (PMO-RALG), the Ministry of Community Development, Gender, and Children (MoCDGC), the National Bureau of Statistics (NBS), representatives of Civil Society Organizations (CSO), and Development Partners (DP).

The study, entitled *Public Expenditure Tracking Survey for Primary and Secondary Education in Tanzania*, by Jens Claussen and Mussa Assad was published by the United Republic of Tanzania in February, 2010. Consisting of findings from seven regions, 27 district councils, 75 secondary schools, and 283 primary schools from June to August 2009, the report is a wealth of information revealing the financial problems within the Tanzanian education system and the means for alleviating them.

This report forms the foundation for the following budget analysis not only because of the validity of its findings, the scope of its research, and its partnership with the Government of Tanzania but also to illustrate the full potential of PETS as tools for finding solutions. Because they reveal fiscal leakages and, at times, corrupt practices, PETS are often used to focus on problems within the sector to which they are applied, and their findings are typically used only to amplify awareness of the social crisis. While issue identification is a requirement of most problem-solving, the value of well-conducted PETS lies not in the problems they highlight but in the solutions they discover. The 2010 MOEVT PETS offers vital solutions to the education sector's financial problems that must be further considered.

With its solution orientation, the budget analysis presented below attempts to turn a new leaf in budget advocacy in Tanzania as the tendency has been to use budget analyses to draw attention to problems rather than solutions. Oftentimes, budget analyses present very thoroughly-developed problems while tagging on solutions at the end. There is no harm in discussing the problems, except, for advocacy purposes, this discussion should take place within the context of the solutions. For effective budget advocacy, budget analysis should be used not just as a tool to demonstrate problems but as a tool to illustrate solutions. This is indeed the difference between budget work and *applied* budget work. This report on the 2010/11 education budget attempts to provide this productive contribution.

1.2 TDMS—The Teacher-Student Solution

The solutions below focus on restoring the teaching profession. It is no secret that the teaching profession has far fallen from the days in which Tanzania's founder preferred the title "teacher" over "president". Perspectives of the teaching profession today were unheard of 40 years ago. Today one can commonly find statements such as that of Florence Katabazi, Policy Advocacy Officer of the Tanzania Education Network (TEN/MET):

I chose teaching and to this day people think I'm a failure. People say, 'I want my son to be a doctor or lawyer, not a teacher.' It's shameful to be a teacher. Everyone runs away from the profession. If they want to be an accountant, they just use teaching as a bridge. At the end of the day we've got 10,000 half-baked teachers and only 400 good ones.

(Smith, 2010)

Research backs up what most Tanzanians sense—that teaching is becoming an unattractive profession. Enrollment rates have skyrocketed. Though they have more students to teach than ever, teachers' increased responsibility has not been met with increased appreciation. Working conditions are poor, teacher housing is lacking, and salaries are some of the lowest in the region. While in 1975, Tanzania had the highest paid teachers in the area second to Burundi, in 2004 teacher salaries in Tanzania had fallen below those of many more of its neighbors, including Kenya, Mozambique, Malawi, and Rwanda (UNESCO & Pôle de Dakar, 2009, pp. 51, 57). A study on secondary education in Ethiopia, Ghana, Guinea, Madagascar, Uganda, and Tanzania entitled *Recruiting, Retaining, and Retraining Secondary School Teachers and Principals in Sub-Saharan Africa* succinctly summarizes what is happening to the teaching profession in Tanzania and elsewhere:

While the demands on teachers are increasing, there is mounting evidence that teachers' morale and status are falling (VSO 2002; Gaynor 1998; Towse et al. 2002, 645). Declining morale has serious implications for recruitment and retention of teachers as well as for teacher performance. The perception that the

status of teachers in society is declining is encouraged by the use of shorter teacher training programs and lowered entry qualifications for teaching (Gaynor 1998, 14). Qualified teachers believe that their work is diminished in the eyes of the public by the employment of unqualified people who are also termed teachers (Halliday 1999, 19). The combination of increased demands and falling status does not augur well for teacher recruitment or retention. (Mulkeen, Chapman, DeJaeghere, Leu, & Bryner, 2005, p. 26)

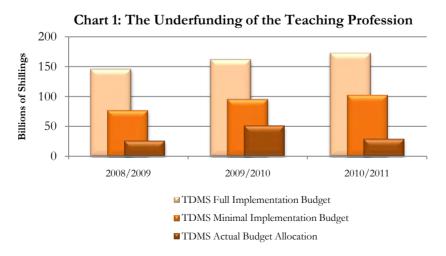
With enrollment rates rising and the need for more teachers growing, the poor treatment and resultant perceptions around the teaching profession further compound the problem by pushing current teachers away from the career and discouraging others from joining it. The same report reveals,

In a study of student teachers in Tanzania, only 10 percent of males and 15 percent of females said that teaching was their first career choice, and 37 percent had been unable to follow their first choice because their grades were too low (Towse et al. 2002). Consequently, teaching tends to attract less qualified candidates.

(Mulkeen et al., 2005, p. 11)

Fortunately, Tanzania already has a strategy in place ready to deal with these matters. The Teacher Development and Management Strategy (TDMS), a five-year plan formulated by the Basic Education Development Committee (BEDC) of MoEVT, was passed in 2008. Its stated aim is "to address the existing demand for teachers, while attempting to address challenges related to quality, including teachers' professionalism, management and motivation" (URT, 2008, p. iv). Together, its 13 strategic objectives are designed "to have and sustain adequate numbers of competent teachers and tutors to effectively support the pre-primary, primary, secondary, adult and non-formal education, as well as Teachers' Colleges" (URT, 2008, p. iv).

Though it addresses many of the issues plaguing the teaching profession and learner outcomes, TDMS has not received enough funds in the national budget to provide for even a minimal level of its implementation. Though even its minimal budget has called for Tsh. 76, Tsh. 95, and Tsh. 102 billion for 2009, 2010, and 2011, respectively, it only received Tsh. 21 and Tsh. 50 billion in 2009 and 2010, respectively, and will receive even less, Tsh. 28 billion at most, in 2011, as illustrated in the Chart 1 below:



(URT, 2008, 2009b, 2010b, 2010d)

In the words of Dunstan Mally, UNICEF's principal planning officer for primary education, "The ministry has tried to develop a management strategy this year but it has not been implemented because of scarce resources. It's good to have a target, but a target without resources is a problem" (Smith, 2010).

This report sets out to show that this issue of scarce resources needs not be the case. Many of the inputs to learner outcomes identified by the 2010 MoEVT PETS can be strengthened by the implementation of TDMS. Scarce resources are indeed a problem in recent budget trends, but they need not be. This report attempts to offer ideas and approaches on how to provide the financial backing to a national strategy that may be pivotal to the quality of the nation's education. These recommendations are not meant to provide definitive guidelines to amending the budget as such detailed budget information to accurately do so is not accessible; rather, they are meant to awaken one to the possibilities of achieving such changes and to demonstrate that such restoration to the teaching profession and its subsequent improvements to learner outcomes are much more in reach than before assumed.

2. Primary Education—Rural Incentives

Though it cannot be equated to the quality of education, the national examinations nonetheless provide the most useful proxy. In 2009, the primary school leaving exam pass rate fell to less than 50%. In other words, half of all the children who make it through seven years of primary schooling are not receiving the expected level of education:



Chart 2: Primary School Leaving Examination Results

2.1 Primary School Student Performance Factors

In its research, the 2010 MoEVT PETS identifies five major resource-related factors that correlate and contribute to student exam performance (pp. 81-85):

- 1) District teacher-pupil ratio
- 2) School infrastructure
- 3) Level of district council spending on non-wage inputs
- 4) School distance from district capital
- 5) District poverty rate

The district teacher-pupil ratio (TPR) is the average number of pupils per teacher in the district. TPR is an understandable factor of student performance because the fewer students for which

each teacher is responsible, the more time and individual attention he or she may provide to those students' educational development. District averages of pupils per teacher ranged from 29 to 121 while TPRs within the individual schools themselves varied more greatly, stretching from 10 students per teacher to 283 (URT, 2010c, pp. 69-70). Meanwhile, the national TPR target according to the Primary Education Development Programme II is one teacher per 40 students.

School infrastructure, measured in terms of "number of classrooms, teacher staff houses, playgrounds, number of student desks and chairs, teacher tables, blackboard, access to drinking water, electricity, type and number of latrines, etc." (URT, 2010c, p. 84), also plays a large role in creating an effective learning environment. These infrastructure inputs were used by the PETS team to produce a school facility index ranking the qualities of school infrastructure found throughout the survey. Staff housing specifically in rural areas proved to be such a determining factor of overall school infrastructure quality that it was disaggregated by the team to illustrate its impact (URT, 2010c, p. 85).

The level of district council spending on non-wage inputs also impacts student performance, mostly because it determines the quality of the learning environment. This factor speaks to the variances in the education spending capacities of district councils as opposed to education expenditure at the national or school level. It also rests particularly on non-wage inputs, that is, development funds, not teacher salaries. This more specifically refers to councils' capacity to expedite capitation grants and capital development grants. The capitation grant is a central government grant provided on a per-student basis for textbooks, teaching and learning materials, repairs, administration needs, and examinations. The capital development grant is another central government grant disbursed for the construction (not reparation as with the capitation grant) of classrooms, teacher houses, and latrines as well as the procurement of desks and chairs.

Finally, a school's distance from the district capital (a rural vs. urban factor) and the district's overall level of poverty impact student performance. Seeing as these two factors are more broad and practically out of the control of the 2010/11 education budget alone, they will only be considered as overall context issues rather than further points of analysis.

At the risk of oversimplification, these factors may be understood in a causal relationship as such:

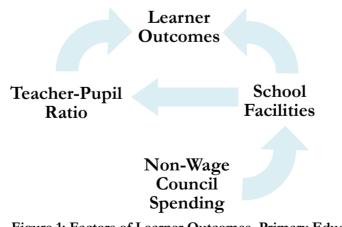


Figure 1: Factors of Learner Outcomes, Primary Education

Non-wage council spending (capitation and development grants) translates into the level of school infrastructure and learning environment. This directly affects student performance while also acting as an incentive (or disincentive) to teacher retention thus impacting TPR, which also

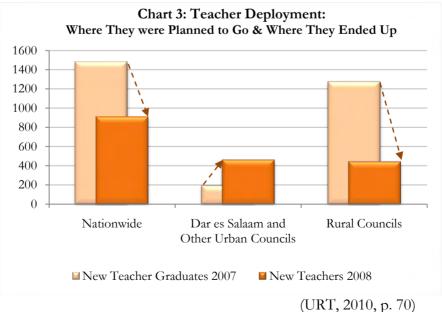
directly impacts student performance. In the following discussion of inputs to learner outcomes, issues surrounding TPR will be addressed while non-wage council spending and school facilities, due to their scope and substance, are examined in a separate publication.

2.2 The Widening TPR Gap

The current system of teacher allocation is not helping lower the teacher-pupil ratio where it needs to be lowered. Though allocations are equitable at the onset, they quickly change. MoEVT allocates the deployment of anticipated new teacher graduates based on districts' TPRs, a design that aims at ensuring those districts with high TPRs receive more teachers while those with low TPR receive fewer. Districts with average TPRs of less than 45 students per teacher are not allocated any new teachers. So, for example, in 2008 MoEVT planned for 1,468 newly graduated teachers to be deployed with 197 of them to be posted in Dar es Salaam and other urban areas and 1,271 to be sent to rural schools (URT, 2010c, p. 70).

This is a good start, but then two things occur. First, "the majority of the newly graduated teachers do not take up positions allocated in rural schools" (URT, 2010c, p. 70), resulting in a decrease in new teachers deployed. In 2008, though there were 1,468 newly-graduated teachers, only 905 (or 61%) took up their posts (URT, 2010c, p. 70). When new graduates find out they've been posted to a neglected rural school, they don't even report or quickly leave afterwards. With an estimated cost of training a Grade A teacher of Tsh. 908,200 (URT, 2008, p. 53), not only does this represent a waste of human resources but a waste of Tsh. 511 million, at least.

Second, there are shifts within the actual deployment or shortly thereafter. When rural district councils fail to utilize their education grants to hire additional teachers, urban councils, which are more adept at executing their budgets, hire them after procuring additional in-year grant allocations. Urban migration of new teachers is the result. Though Dar es Salaam and other urban areas were allocated 197 new teachers in 2008, by the end of the year there was an increase of 461 new teaching staff. Meanwhile, though rural councils were to receive 1,271 new educators, there were only 444 new staff at the year's end.



These trends are summarized in the chart below. If deployment would go as planned, the bars would be even:

These tendencies negate efforts to improve the state of education in Tanzania. The nation needs more teachers in classrooms, but this cannot be efficiently achieved when so many newly-graduated teachers don't report for work or quit immediately. Addressing the teacher shortage when this situation exists is like trying to fill a bucket with water when there are huge holes in the bottom: a lot of water will be wasted, it's questionable if the bucket will ever be full, and even if it does become momentarily full, it will immediately start draining again.

2.3 Provide Remote Incentives

These trends are alarming and if left unaddressed will continue to create a marginalizing, discriminatory education system. To repair this situation, the researchers behind the 2010 MoEVT PETS repeatedly emphasize the need to provide incentives to teachers serving in remote areas:

To change the significant disparity in P/T and performance among schools the specific incentives (allowances) for teachers serving at schools located in rural communities should be introduced. (p. 15)

Budgeting for new teachers and/or changing grant allocations between councils does not change inequality in actual execution unless specific measures are applied to enable rural and remote councils and schools to actually employ new teacher[s] allocated and retain them i.e. *like the introduction of incentive schemes for teachers serving in rural and remote councils and schools* as mentioned in sections above. (p. 71, emphasis added)

This confirm[s] observations presented in previous sections i.e. that changing allocations and assisting councils with high P/T ratios will in addition require *specific incentives for teachers in schools located in remote places* with the level of remoteness measured by their distance to urban centres. (p. 72, emphasis added)

Remote incentives often include benefits like hardship allowances, faster promotion, earlier or higher salary raises, transport or housing allowances, the provision of housing, special study leave, or better training opportunities (Mulkeen & Chen, 2008; UNESCO & Pôle de Dakar, 2009). The availability of these benefits is based on the remoteness of the location in which the teacher works, with "remote" possibly defined in terms of distance from the district capital (as in the 2010 MOEVT PETS, p. 85) or distance from a paved road (as in Zambia's rural teacher incentives [Mulkeen & Chen, 2008, p. 6]).

Remote incentives have already been implemented by a range of Tanzania's neighbors experiencing the same difficulties in attracting and retaining teachers in rural areas. The World Bank report *Teachers for Rural Schools: Experiences in Lesotho, Malawi, Mozambique, Tanzania, and Uganda* summarizes the actions these countries have taken in the chart below:

| Table 1: Incentives to Encourage Teachers to Move to Rural Areas, 2005 | | | | | | | |
|---|--|---|--|--|--|--|--|
| Lesotho | Malawi | Mozambique | Tanzania | Uganda | | | |
| Flat bonus of 275 Maloti (Tsh. 60,000) per month is given to locate in a mountain area. | No incentives are given for locating in a rural area, but they are being considered. Education data show a strong correlation between housing and the presence of female teachers. | Bonuses can be up to 100% of salary, but they are paid only to highly qualified teachers. Most primary teachers get no additional pay to move to rural areas. | None. Incentives available in the 1980s were abolished in the 1990s. In the Primary Education Development Plan, priority is given to housing for rural teachers, but this is not implemented in practice. | Hardship allowance of 20% of salary for "hard-to-reach" areas was introduced in 2001 for qualified teachers only. Difficulties arise in determining which schools are hard to reach. | | | |

(Adapted from Mulkeen & Chen, 2008, p. 22)

Malawi has now introduced hardship allowances for its rural teachers, and Uganda just succeeded in raising its 20% hardship allowance to 30% starting this year. Meanwhile, teacher retention and attrition in Tanzania goes unaddressed.

Although rural teachers (and their students) have not been attended to on this matter, the need for remote incentives is not news to MoEVT, as identified by TDMS:

[T]here is evidence that the teaching profession does not attract the best achievers due to a number of reasons, including poor working conditions. Most teachers posted to rural areas and particularly those with difficult conditions report in low numbers, and those who are already there, seek transfers to urban areas.

(URT, 2008, p. 5)

To counter this, TDMS sought (and still seeks) to establish an "[a]ttractive incentive package for teachers at all levels with special consideration to those in difficult environments, instituted by 2009" (URT, 2008, p. 5). This is yet to happen as TDMS has consistently lacked the funds to be fully initiated.

Moreover, this target of remote incentives, which falls under the first strategic objective to "attract and retain adequate numbers of quality teachers" (URT, 2008, p. 5), is one of the first to be cut when TDMS experiences budget shortfalls. TDMS has planned different budgets depending on different levels of fund availability. The provision of remote incentives is only included in the scenario in which full funds are committed to TDMS. Meanwhile, the allocations for TDMS struggle to reach the last scenario, the scenario which assumes the least amount of funds available for TDMS. Given the importance of remote incentives for teachers, this element should be given priority in all of TDMS's budget scenarios.

TDMS's planned remote incentive package for 2010/11 would have cost Tsh. 2.4 billion (URT, 2008, p. 25), but again, that is not happening due to "scarce resources." But what about other types of allowances throughout the government? In the analysis entitled *Unnecessary Expenditures:* A Brief on the Government's Initiative to Refocus Expenditures, Sikika (2010b) reveals that in the 2010/11 budget allowances across the board have risen to Tsh. 269 billion. Despite government promises earlier this year that, "The money will be invested in areas with economic value and meaningful returns on investment and not for paying allowances or seminars and workshops"

(Minister for Finance and Economic Affairs Mustafa Mkulo in Mugarula, 2010), allowances actually increased 25% from Tsh. 216 billion in 2009/10.

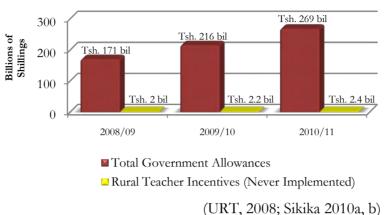


Chart 4: Allowances, But Not for Rural Teachers

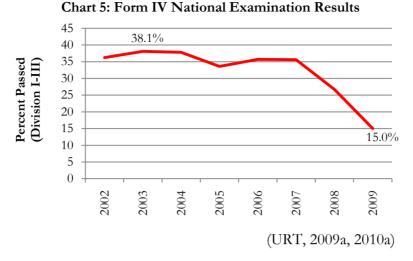
Many of these allowances are tagged to work travel, seminars, and workshops, falling under what Policy Forum (2009) calls "perverse incentives" as they end up diminishing productivity and service delivery rather than enhancing it:

With incentives wrongly aligned, civil servants are likely to be more interested in attending the next capacity building activity, report writing workshop or field trip, and are more likely to spend the time on the job to claim allowances and to secure the next workshop than to provide quality products or services. (p. 6)

With yet another year of the Tanzanian budget being full of allowances, this time Tsh. 269 billion worth, much of which is no doubt of the "perverse" type, is there no way that Tsh. 2.4 billion can be put toward an incentive that is reported to increase the quality of service delivery? Can not even 1% of the government's allowances be transferred into a program that addresses the nation's teacher crisis in rural areas?

3. Secondary Education—Teacher Upgrading

Turning to secondary education and again using examination results to help provide a picture as to what is happening with its quality, we see a recent drastic plunge in learner outcomes. Form IV pass rates (defined as Division I-III) have reached an all-time low of 15%. This current pass rate is less than half of the 10-year average: whereas on average 33% of secondary students passed the Form 4 exams from 1999-2008, only 15% passed in 2009. This wasn't a gradual decline in learner outcomes: this year's pass rate almost cut in half that of 2008.



3.1 Secondary School Student Performance Factors

Just as they did for primary education, the analysts of the 2010 MOEVT PETS isolate the key factors of student performance according to their findings (pp. 101-104):

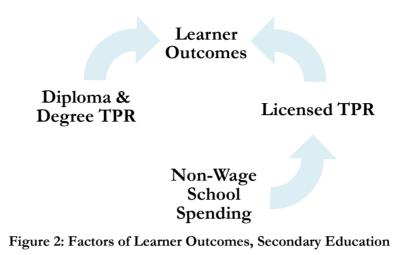
- 1) School government payroll teacher-pupil ratio
- 2) School non-wage spending
- 3) School distance from district capital
- 4) Local poverty rate

Though they appear to be somewhat similar to those of primary education performance, these factors do have their nuanced differences. First, the TPR impact on learner outcomes is not based on the district average but on the school average. More importantly, student performance was found to be correlated not to TPR in general but specifically to the number of teachers on government payroll per student. As newly-built secondary schools, particularly rural community schools, experience human resource shortages, they are using any and all available funds (grants, parental fees, and contributions) to hire additional teachers. These teachers are less qualified than those on government payroll to such an extent that secondary school student exam results mirror not the school's TPR in general but the school's TPR of teachers on government payroll (URT, 2010c, p. 102). Though visible in terms of means of pay (government or community), this is more of a matter of teacher qualification as those hired and paid by the school are typically licensed teachers whose highest education level is the Form VI examination while those on government payroll are most often diploma and degree-holding teachers (URT, 2010c, p. 96).

Contract teachers do make a difference however, and that impact is actually seen in terms of non-wage spending. Non-wage spending reappears in the list of factors but again at the school level, not at the district level. This time, however, non-wage spending is less connected to school facilities than before. Rather, the MoEVT PETS emphasizes its relationship to contract teachers (p. 103). As mentioned above, secondary schools are employing all kinds of resources, including development grants, to battle the human resource strain. In the schools surveyed, only 19% of development funds were actually being spent on development, with a large part of them going toward hiring additional teachers (p. 101). With secondary schools, non-wage spending contributes to lowering the TPR.

As with primary education, school distance from the district capital and local poverty level correlate to learner outcomes but will not be dealt with further as they are too large of matters to be addressed by any single budget.

These factors may be illustrated as below:



The TPR specific to government payroll teachers directly correlates with student performance. At the same time, non-wage school spending facilitates the hiring of more community contract teachers and creates a more favorable TPR that also contributes to learner outcomes.

3.2 The Influx of Under-Qualified Teachers

The ward secondary school building initiative has been a success, but while from 2005-2009, the number of secondary schools and enrollment increased by 135% and 178%, respectively, the number of teachers only increased by 81%, almost doubling the secondary school teacher-pupil ratio from 1:22 to 1:43 (URT, 2009a). This type of skewed expansion is taking its toll on the quality of education.

To cope with this strain, secondary schools, particularly the more recently built community schools, are forced to hire the least qualified teachers. The chart below, comprised of data from the schools surveyed by the 2010 MOEVT PETS, shows this imbalance, with government schools absorbing almost all of the degree teachers and leaving the new community schools with the licensed teachers:

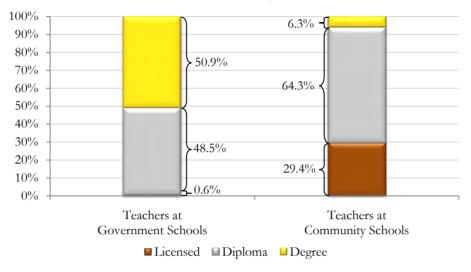


Chart 6: Where are the Most Qualified Teachers?

(URT, 2010c, p. 96)

The researchers of the 2010 MoEVT PETS have no doubt lumped paraprofessional teachers together with licensed teachers. While licensed teachers are Form VI leavers that have undergone a short teacher training, paraprofessional teachers are Form VI leavers who have no teacher training but are hired by community schools as teachers out of dire need. This grouping together is suggested when the report reads, "licensed teachers with Form VI exam as the highest level of education" (URT, 2010c, p. 96). Likewise, the MoEVT PETS first draft report shows that licensed, diploma, and degree teachers make up only 73.8% of rural secondary school teachers, leaving 26.2% mostly likely being paraprofessionals (URT, 2009c, p. 47).

Tanzania is not alone in the struggle against the opportunity costs between not having enough teachers and having under-qualified teachers. In a report entitled *Africa Education Watch: Good Governance Lessons for Primary Education*, Transparency International assessed seven African countries: Ghana, Madagascar, Morocco, Niger, Senegal, Sierra Leone, and Uganda. Though no research was conducted here, some of its findings describe Tanzania's situation exactly:

The recruitment and retention of teachers remains one of the challenges for any education system, particularly where resources are limited. Schools have resorted to hiring less-qualified teachers, on limited contracts, drawn from the community, outside the public service pay and tenure structures, as a way to provide the human resources needed to cope with rapid expansion. But this practice remains controversial. These so-called "contract teachers" may be recruited and managed by the school, using public or parental funding. (Antonowicz, Lesné, Stassen, & Wood, 2010, p. 3)

In the end, though the picture of education may be found at community secondary schools with a "teacher" in a classroom full of students—there may be very little learning actually transpiring, as demonstrated by the recent plunge in exam results.

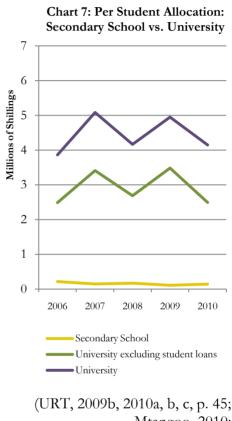
3.3 Upgrade Licensed and Paraprofessional Teachers

One approach to this situation is not to focus only on the recruitment and training of new teachers but on the upgrading of existing ones, particularly licensed and paraprofessional teachers filling the gaps in community secondary schools. If the above data from the MoEVT

survey is used as a proxy, there would have been about 6,000 licensed or paraprofessional teachers in secondary schools nationwide in 2008 (URT, 2010a, 2010c, p. 96).

Again, TDMS has a well-written objective on this matter waiting to be implemented. In its target of developing adequate quality teachers, it aims for "five thousand (5000) licensed teachers upgraded to degree level by 2013" (URT, 2008, p. 7). To achieve this, TDMS calls for Tsh. 7.5 billion (URT, 2008, p. 26), but again, lack of budgetary commitment is preventing the full realization of this target. Tsh. 7.5 billion sounds like a lot of money, but in terms of the education budget, it is not. If upgrading secondary school teachers is perceived by MoEVT as valuable, there are myriad places to get these funds.

One way of thinking about this is to look at the trend of secondary education funds versus other educational priorities. Though it is difficult to advocate the cut in one realm of education to facilitate improvements in another, something nevertheless needs to be said about the budget trends in higher education. In 2009/10, despite only serving 1.5% of all types of students enrolled in any form of education in Tanzania, higher education (university, technical, and other tertiary) represented 28% of the Tanzania's education budget while in other countries such as Kenya it holds a more appropriate share of 20% (URT, 2010a, 2010b; Siringi, 2010). There are currently only 118,911 government university and university college students in Tanzania while there are 12 times as many (1,388,347) enrolled in government secondary schools (URT, 2010a). Despite this, much more money is spent on higher education than secondary education year after year. Performing a simple beneficiary analysis reveals that over the last five years the government has been spending an average of Tsh. 4.4 million per university student annually and only Tsh. 155,000 per secondary student as in chart 7 at the right. Even excluding student loans, the government annually spends an average of 19 times more per each university student than each secondary school student.



Mtangoo, 2010; Ngoromera & Chizoza, 2010)

The 2010/11 education budget attempts to rectify this matter by doubling secondary education's budget from Tsh. 197 billion to Tsh. 414 billion, but the budget for higher education remains far in the lead with Tsh. 698 billion (URT, 2010b). In fact, while secondary education has grown now to receive 20% of the total education budget, higher education has swollen to 36% (URT, 2010b).

Again, no one wants to see a worsening higher education system and it's understandable that inputs to higher education are costly, but questions must be raised about such widely variant allocations. The potential quality improvements offered by TDMS's teacher upgrade plan represent only 1% of the higher education budget. As secondary school students encompass a greater base of Tanzania's labor force, would it not be wise to adjust these budgets for more proportional investments in the country's future?

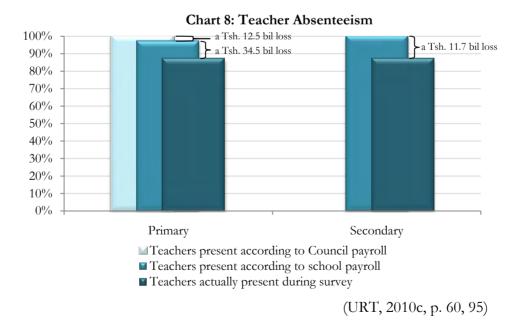
4. Additional Considerations—In-Service Training

The above inputs of remote incentives and teacher upgrading contribute in different ways to ensuring there are enough qualified teachers to educate primary and secondary students. While this may help with TPR statistics, it won't help learner outcomes if these teachers are on payroll but are not teaching. Even if TPR is improved, there is still the question of keeping teachers in the classroom.

4.1 Teacher Absenteeism

Teacher absenteeism is a major problem in Tanzania as well as other developing countries, and the 2010 MoEVT PETS provides an enlightening picture of how much teacher absenteeism is affecting Tanzania's education system. In the primary schools visited, it found that 10% of the teachers on the school payroll were not present at the school over the entire period surveyed, the month of May 2008. These were not teachers who were in the middle of being transferred but were rather on leave of absence for further study, were sick, or had taken other civil service duties. In a number of cases, teachers were even absent for reasons unknown to the head teacher. At the council level, teachers (again excluding those being transferred) who were on council payroll for the entire year but not on school payroll made up 3.7% of all teachers on council records. In sum, the MoEVT PETS estimates primary school teachers not teaching create a Tsh. 47 billion loss for mainland Tanzania per year (p. 60).

Meanwhile, at secondary schools, teacher absenteeism was 13% on average. In some schools visited, 70% of the teachers weren't present. These survey results, if approximate for all of mainland Tanzania, represent a Tsh. 11.7 billion loss in teachers being paid despite not teaching (URT, 2010c, p. 95). With the above data for primary schools, absent primary and secondary school teachers are costing Tanzania Tsh. 58.7 billion a year.



Addressing teacher absenteeism is also a recommendation made by the recently-released learning assessment conducted by Uwezo (2010) embodied in a report entitled *Are Our Children Learning?* which claimed that "teachers are both poorly motivated and not teaching (ie 'time on task' is very low)" (p. 6, 45).

4.2 Ensure Opportunities for Professional Growth

The factors already advocated above play a large part in creating an attractive working environment for teachers. Incentives for those far from urban centers and capacity building through upgrading contribute to a teacher's welfare and motivation to do his or her job. In addition to this list, one may further emphasize professional development. As stated by UNESCO and Pôle de Dakar's joint publication *Universal Primary Education in Africa: The Teacher Challenge*,

One way of impacting motivation and of reducing absenteeism and attrition phenomena is to provide teachers with attractive career structures. Aside from pay, which is still a major issue for social dialogue, the opportunities open to teachers for promotion and personal and professional development are also important. (p. 165)

Professional development is not only a way of ensuring a higher quality of education for primary and secondary school students; it's a means of restoring objective value and self-worth to teachers through a life and career of constant learning. This investment motivates and retains teachers by honoring their service and bestowing upon them the essence of being a teacher. They will remain in classrooms not because of salaries or incentives only but because they will have internalized the teaching profession. They continue to teach because they have indeed become teachers, a life choice and calling that one cannot simply quit. About professional development, UNESCO and Pôle de Dakar go on to say,

Firstly, the aim is to enable the teacher progress in his/her professional practice and so enhance the effectiveness of his/her teaching. The fact of benefiting from a supportive framework shows the teacher that he/she is accompanied throughout his/her career and this can but have a positive influence on his/her motivation. (p. 165)

Tanzania's TDMS has an entire multistage objective to "ensure continued in-service teacher training and professional growth" with such targets as:

- (a) Gender sensitive in-service training plan of teachers, tutors and education managers in place by 2009.
- (b) Training programme and implementation framework for a variety of inservice courses instituted by 2010.
- (c) Education managers (newly appointed headmasters/mistress, principals, and head teachers of demonstration schools), teachers and tutors to have attended in-service training by 2013.
- (d) Management of In-service training at Teacher Colleges and Ministry improved by 2009.
- (e) Zonal College Centres for In-service training strengthened across the whole country by 2009.
- (f) Teachers' Resource Centres (TRCs) revived and strengthened by 2011.
- (g) Professional networks established and operationalised for teachers, tutors and education managers by 2010.
- (h) Teacher competence framework developed by 2010.

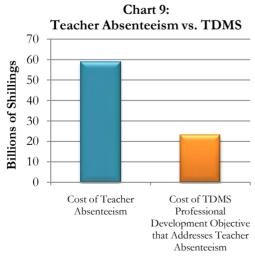
(URT, 2008, p. 12)

All of these targets will contribute to the professional growth discussed above. If target (c) is to capacitate head teachers/headmasters/mistresses in their responsibility to monitor and ensure teacher attendance, it will provide more direct impact on the issue of teacher absenteeism. As stressed by the MoEVT PETS, "Monitoring of teacher attendance needs to be strengthened. ...Effective oversight will also entail formalisation of teacher absence at all times regardless of reasons for absence" (URT, 2010c, p. 15). This provision of TDMS will likely aid head teachers/headmasters/mistresses in upholding their supervisory duties.

Less about strict enforcement of attendance, TDMS takes an additional, more holistic approach. Target (g) is indeed another recommended means to establishing support for teachers. In discussing the facets of professional growth,

Teacher networks are another interesting possibility; they consist in bringing teachers together to enable them share their professional experience and to benefit from training. ... For teachers in remote areas, these meetings have the advantage of putting an end to their isolation by giving them the opportunity to share their experience with teachers in similar situations. ... In addition, this type of device can benefit from the input of experienced teachers who could take on pedagogical responsibilities for schools and administrative areas. These senior teachers or mentors, who have experience and if possible have followed specific qualifying training to support other teachers, would moreover open up a new path to promotion for the most dynamic teachers. (UNESCO & Pôle de Dakar, 2009, p. 167)

Finally, seeing as most of this objective deals with the regular and continuous provision of inservice training, there must be a place at which to conduct these trainings as well as provide educational materials. While zonal college centres will provide such capacities (target (e)), teacher resource centres (TRCs), perhaps due to their number, are to play a critical role in facilitating in-service training. As target (f) stipulates, TRCs are to be "revived and strengthened." It is indeed true that TRCs have been neglected over the years. They offer little service and have even less resources, despite their name. With 600 TRCs nationwide, it will take a lot to revive and strengthen them, and accordingly, target (f) carries the greatest budget share of all of these targets.



(URT, 2008, 2010c, p. 60, 95)

The price tag of this portion of TDMS for 2010/11 is Tsh. 22.9 billion, with Tsh. 14.5 billion meant to go toward strengthening TRCs, but again it has not been implemented due to the low priority it has been given in the budget since TDMS was originally passed in 2008 as a national strategy. Yes, it will take some planning to find these funds in the budget, but as already seen above, there are a variety of places to look. The bottom line is that it is poor financial management to allow teacher absenteeism that costs the country Tsh. 58.7 billion a year to continue while it could be curbed by a strategy that costs less than half that amount, as illustrated by Chart 9 to the left.

5. Conclusion—The Urgent Need for TDMS

The Ministry of Education and Vocational Training has put forth extra efforts over the last two years researching and publishing the detailed diagnosis of the primary and secondary education system revealed by its expansive public expenditure tracking survey. Luckily, with this diagnosis came prescribed treatments for curing the massive failure in learner outcomes currently ailing Tanzania. Some of these prescriptions have been more thoroughly analyzed in this report, namely:

- 1) Providing incentives to teachers in remote areas
- 2) Upgrading licensed and paraprofessional secondary school teachers
- 3) Ensuring opportunities for professional growth of primary and secondary school teachers

Several of these treatments are already outlined in an approved government strategy called the Teacher Development and Management Strategy. This program has not been given priority, and meager budget allocations continue to prevent it from being even minimally initiated, even though it is already halfway through its five-year plan.

Its minimal implementation for 2010/11 is estimated to cost Tsh. 102 billion (URT, 2008, p. 34), but it has not received such funds. In contrast, total 2010/11 budget allocations for allowances have risen to Tsh. 269 billion (Sikika, 2010b), more than twice what it would cost to begin curing the country's teacher crisis and restore quality to the education system.

The more pertinent question in this situation however is not how much will TDMS cost, but how much will it cost not to have TDMS? As seen above, neglecting teachers is having costly effects. Taken straightforwardly, it may be more expensive to continue *not* implementing TDMS than it would be to implement it:

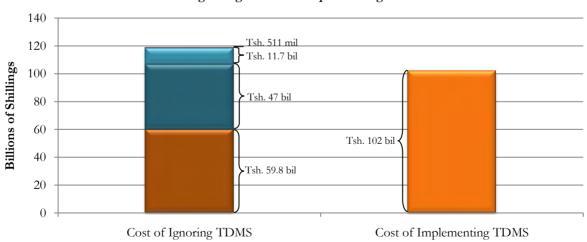


Chart 10: Which Costs More? Ignoring TDMS or Implementing TDMS?

Cost of Licensed and Paraprofessional Teachers not Contributing as Greatly to Learner Outcomes

Cost of Primary School Teacher Absenteeism

Cost of Secondary School Teacher Absenteeism

Cost of Newly-Graduated Teachers not Reporting or Abandoning their Posts

Of course, the costs of not implementing TDMS don't stop here. The loss in national resources created year after year by under-educated primary and secondary school pupils leaving the education system with less-than-desired capacities to help themselves and their country is vast and immeasurable.

As stated in the introduction, these cost breakdowns are not meant to provide exact budget alternatives, and there is no way to know if the interventions provided by TDMS would 100% cure the discussed issues hindering Tanzania's education. The point remains, however, that these relationships no doubt exist on some level, finding the resources required to implement TDMS may be much more in reach than previously thought, and implementing TDMS may very well be cheaper than not.

One is indeed reminded of the quote by Derek Bok, academic and lawyer, who was cited by Prime Minister Mizengo Pinda in a speech in 2008: "If you think education is expensive, try ignorance." The case of TDMS shows how costly doing the unwise thing can be. The question that remains is: How much longer will Tanzania pay for ignorance?

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As the development of Tanzania moves forward, the role that each and every citizen has to play in the process is becoming more and more apparent. Through unified, collective efforts we achieve more than we could as individuals. One of the key tools that citizens of a representative government create to achieve their common goals is the national budget. The budget is a guide that helps efficiently transform funds into improvements in service delivery, such as safer drinking water, more reliable health services, and better roads. And just as the budget has implications on social services such as water, health, and infrastructure, so it does on education as well. These implications are not merely in terms of material progress such as schools constructed, books bought, and exams administered. They potentially translate into the real desired results of education—learner outcomes by which children, community members, and citizens attain the capacities to think critically, solve complex problems, and discover creative solutions to propel communities and the nation forward.

The following is an analysis on how to improve these learner outcomes by adjusting certain budget mechanisms. The key solutions identified are:

- 1) Provide incentives for teachers posted in remote schools.
- 2) Upgrade licensed and paraprofessional secondary school teachers.
- 3) Ensure opportunities for professional growth through in-service training.

Fortunately, Tanzania already has a strategy in place ready to deal with these matters. The Teacher Development and Management Strategy (TDMS), a five-year plan formulated by the Ministry of Education and Vocational Training, was passed in 2008. Though it addresses many of the issues plaguing the teaching profession and learner outcomes, TDMS has not received enough funds in the national budget to provide for even a minimal level of its implementation.

This report sets out to show that this issue of scarce resources needs not be the case. Many inputs to learner outcomes can be strengthened by the implementation of TDMS. Scarce resources are indeed a problem in recent budget trends, but they need not be. This report attempts to offer ideas and approaches on how to provide the financial backing to a national strategy that may be pivotal to the quality of the nation's education. These recommendations are not meant to provide definitive guidelines to amending the budget as such detailed budget information to accurately do so is not accessible; rather, they are meant to awaken one to the possibilities of achieving such changes and to demonstrate that such restoration to the teaching profession and its subsequent improvements to learner outcomes are much more in reach than before assumed.

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