Is Extra Funding for Primary Education Making a Difference? Conceptual and Measurement Challenges

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Is Extra Funding for Primary Education Making a Difference?[1]

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In recent years, the Government has increased its allocations to primary education. Donor funding for education is also on the increase, though difficult to quantify since a significant portion of it still takes place outside the main budget (Budget books, Education PERs). Among policy circles many share the view that basic education is finally getting the priority attention it deserves.

However, the state of primary education in Tanzania continues to be in a state of crisis. National data, qualitative studies and community surveys generally continue to show that progress has been slow and there are high levels of dissatisfaction. [3] Two basic questions therefore arise: Is the increased funding making a difference? And how could education expenditures make a bigger difference?

How does one measure progress in education? The PRSP recognizes the critical importance of education in poverty reduction and sets several targets to be achieved by the end of 2003. These can be summarized as follows:

- Increase NER from 57% to 70% [4]
- Increase GER from 77% to 85% [5]
- Increase primary-secondary progression from 15% to 21%
- Reduce dropout rate from 6.6% to 3%
- Increase Primary School Leaving Examination (PSLE) pass rate from 20% to 50%
- Expand adult/non-formal education

An assessment of progress towards these targets has been done by REPOA and the Education PER.[6] While the findings differ somewhat, both show that by the end of 2001 GER and NER had risen dramatically and transition to secondary had improved; but that there was limited progress on reducing dropouts, improving performance and expanding adult/non-formal education.

A more detailed discussion of these data will not be undertaken here. Rather, for the purposes of this analysis we are more interested in the following types of questions: Are these good measures for measuring progress in education (i.e. do they help us

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[1] Based on a paper presented to REPOA in July 2002.

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[3] BEDC *Education Status Report* 2002; United Republic of Tanzania and UNICEF *Situational Analysis of Children*, 2001, kuleana *The State of Education in Tanzania* Mwanza, 1999; Maarifa ni Ufunguo *Cost Sharing in Education in Kilimanjaro* 2001.

[4] The Net Enrolment Rate (NER) is the ratio of "total number of 7-13 year olds enrolled in school" to "total number of 7-13 year olds in the population".

[5] The Gross Enrolment Rate (GER) is the ratio of "total number of children enrolled in primary school" to "total of 7-13 year olds in the population". In Tanzania the GER has often been significantly higher than the NER because of late enrolment. Many children do not enrol until age 9 or 10.

[6] Galabawa, J and Mbelle, A "Public Expenditure Review of Education" May 2002.

know what is really important in education)? Are the targets appropriate and feasible? And would achieving these targets contribute significantly to poverty reduction?

This paper aims to articulate a set of issues that can help address questions raised above. It seeks to initiate a broader analysis and discussion among members of the PER and PRSP working groups, the BEDC and in the public sphere.

The paper is divided into three sections. Section 1 addresses a number of measurement challenges in answering the question: is increased funding for education making a difference? Section 2 discusses some of the reasons for which the impact of increased funding may be limited. Section 3 presents a brief conclusion and suggests five initial action points for moving forward.

1. Measurement Concerns

Assessing progress requires the measures used to be both measurable and good indicators of desired change. This section addresses the measurement concerns in relation to the PRSP targets.

1.1 Enrolment Data

What measures does one use to assess the impact of increased spending? General indicators of education are notoriously problematic. The most commonly used indicators have to do with enrolment. These include the NER and GER. However, these measures are often little more than names on a list at a certain moment in the year. They do not tell you whether children are actually in school (attendance), the frequency of their attendance, and what happens to them once they are in school. Children may attend school but not learn due to a variety of factors. These include a poor learning environment, poor teaching, fear of violent punishment by teachers, minimal support for school work at home, hunger and pressures to withdraw in order to help earn family income. External compulsion (including penalties) can lead parents to enrol children in school without any commitment to ensure full-time attendance and completion, once it is 'safe' to remove a child.

While enrolment data are generally disaggregated by sex and age, analysis by class or income level is difficult to do, even though the poor are most likely to be excluded from educational opportunity. A preliminary analysis of the new HBS indicates that enrolment among the poor may have actually declined over the last decade, which demonstrates the importance of having data that can measure equity concerns. In this connection data disaggregated by village and ward level would also be very useful, since intra-district disparities are likely to be very large (URT/UNICEF).

The accuracy of data, given the way they are collected and compiled, is also questionable, especially since there does not appear to be a robust mechanism to check the quality of the data. Among other things, reported data can often be highly inconsistent. For example, data in BEST shows that enrolment in private primary schools rose by 10.0 % between 1996 and 1997, 17.7% between 1997 and 1998; and then dropped by 3.0% between 1998 and 1999. Between 1999 and 2000 enrolment rose by 66.8% and then fell by 51.1% in 2001 How does one explain that enrolment more than doubled in one year only to fall by half the next? This, when the number of private schools increased by 60.9% between 2000 and 2001! Surely this is a data problem.

Similarly, data on school dropouts is believed to significantly undercount actual numbers, probably because a significant proportion of those who leave school continue to remain on enrolment registers. A more accurate picture can be derived by tracking cohorts i.e. by comparing the numbers of those who graduated in Standard Seven with the Standard One numbers six years earlier. Such comparisons (URT/UNICEF, Kuleana) show that in recent years more than one-third of those who started primary education fail to complete Standard Seven, far greater than officially reported data.

Other sources, such as the Government's school mapping reports, are of generally poor quality and contain too many discrepancies to be considered reliable.

The new census data should now also be integrated into the routine data systems so as to be able to determine the actual number of school aged children.

1.2 Performance Data

Performance or terminal examination results are often used as indicators of the quality of education. Using such 'output' data can be useful in assessing the impact of schooling. However, performance data are only as good as the nature of the examinations used to generate them. Primary school leaving examinations (PSLE) in Tanzania are widely considered to measure memorization and regurgitation of facts, rather than real skills, creativity or analytical ability. Information 'crammed' by pupils is reported in many cases to be forgotten soon after the completion of the examinations.

Moreover, PSLE results may be significantly influenced by access to private preparatory classes popularly known as 'tuition' that are conducted after normal school hours for a fee. Consequently, PSLE results may better reflect the impact of such private initiatives rather than public education itself.

Finally, a number of technical issues need to be clarified if performance rates are to be measured across different years. Among other aspects, one would need to ascertain whether examinations are set at the same level and the 'pass mark' remained consistent across the comparison years.

1.3 Financial Data

To ascertain the impact of funding increases, one requires accurate budget and expenditure information, but obtaining these across different years can be extremely difficult. Different sources often provide widely differing data and use different categories such that comparison across sources and years can become a precarious exercise. The fact that education expenditure is spread across different ministries and levels (MOEC, PORALG, National-Regional-Council-School levels) also makes tracking difficult. Moreover, a large portion of donor expenditure on education remains outside the budget and is not captured in the national data.

Large discrepancies between allocations, disbursements and actual use present perhaps the greatest challenge. Funds earmarked for education, particularly "Other Charges" (OC), are often either not made available due to shortfalls or used for other purposes (Auditor General's Reports, REPOA's Pro-Poor Expenditure Tracking). Consequently, reported expenditure on education may in many cases have been used elsewhere. This aspect will be discussed further below.

In short, the quality of both educational and financial data is problematic and somewhat unreliable. Assessments using these data regarding the impact of additional funding in education nonetheless provide indicative information, but should be treated with caution.

1.4 Determining Cause and Effect

Even if the thorny measurement issues in relation to education and financial aspects raised above were to be resolved, determining the nature of a cause and effect relationship is still difficult. The fact that enrolment expanded at the same time that funding increased does not necessarily mean that the latter led to the former. It could be that the change was influenced by other factors. The large jump in enrolment this year is likely due to the abolishment of school fees and a strong political campaign to enrol children, rather than increased funding.

2. Barriers to Education Improvement

It is now widely understood that basic education is one of the most effective means to reduce poverty and spur economic growth. But will any kind of education do? What aspects of education are most effective?

Quantitative data in themselves are not adequate to give a good picture of the situation of schooling. Having sufficient classrooms, textbooks, teachers and pupils does not give us a picture of the kind of education provided. These are necessary but insufficient conditions for good education. The most important feature of education is how these different variables – buildings, teachers, pupils and teaching resources – combine. One needs to "measure" classroom interaction between these variables to build a picture of the kind of education provided. At the end of the day it is this element that is most important in enabling the pupil to have the skills, aptitudes and values that will enable her to thrive and contribute to development.

In a rapidly changing social context, young people who graduate from school need much more than a school leaving certificate and the ability to regurgitate facts in examinations. Nor are there ready-made jobs for those who complete primary or secondary schooling. Rather, young people today need to be able to analyze the world, evaluate options and create solutions. This will require skills such as creative thinking, problem solving, working together, dealing with conflict and being resourceful in constrained circumstances. They will also need to learn critical values such as democratic decision-making, transparency, questioning authority and mutual respect.

If this is the case, one needs to examine the allocation of education funding. It is not good enough to promote increased spending for education; additional resources need to be used towards aspects that matter the most. Unless this is done, additional funding risks having its impact limited to the expansion of infrastructure and enrolment, without improving the actual learning processes and outcomes.

In the light of this, what could be some of the reasons why the situation of education appears not to have improved significantly despite increased expenditures?

2.1 It takes time to show impact

Schooling is a long-term process, and the impact of inputs today may only become visible several years later. This means that demonstrating the effect of increased funding is a complex and long-term endeavour.

2.2 The things that matter are not being adequately funded, and funds do not reach the school level

An analysis of expenditures in primary education shows that over 90% of the funds are used towards "Personnel Emoluments" (PE), and a significant portion of the remaining balance towards administrative costs. This leaves a virtually negligible amount for promoting the other aspects of learning and classroom interaction. In 1998/99, for instance, PE took up 94.4% of the Government Budget, leaving only 5.6% for all other charges. In per pupil terms this left only Tshs 744 for the entire year!

When OC is increased, as has been the case in recent years, this does not necessarily mean that it will be used for improvements in critical aspects of quality. Evidence indicates that in many cases districts prioritize administrative and planning aspects over the promotion of the learning environment in school.

Notably, the recently introduced PEDP aims to address this problem by introducing a capitation grant of $10 per enrolled child that was to be ring-fenced for quality improvements at the school level. Of this amount $4 was to be used by districts to procure textbooks and learning materials, and $6 used directly by the school committee. However, one year into the program, reports indicate that virtually none of these funds have reached the school level. The draft Government PEDP Stocktaking Report (MOEC) and NGO studies (HakiElimu, Maarifa ni Ufunguo, TEN/MET) confirm that as of May/June 2002 schools had only received funds for classroom construction and 'UPE replacement', but not those for improving quality [whether in cash or kind].

In fact the increases in enrolment under PEDP are reported to have led to overcrowding and chaos, placing an enormous strain on under-motivated and ill-equipped teachers and further eroding quality of education.

2.3 Funds are inequitably distributed

The criteria used for disbursing education (and other priority sector) OC to Local Councils is not transparent and seems to be based on historical precedent rather than actual need. Consequently, an analysis of 2000/2001 OC funds shows that the disbursement is highly inequitable in per pupil terms, with the top funded district receiving 10 times as much as the lowest funded district (URT/UNICEF, pp: 66-67).

2.4 School funds are diverted to other uses

Allocating and disbursing funds for particular purposes is one thing; making sure they are used as intended is another. Several credible sources, including the reports of the Controller and Auditor General, the Pro-Poor Expenditure Tracking Survey, and NGO and media accounts report that the Ministries responsible consistently fail to adequately account for the use of funds. Fungibility is common, particularly at the district level, where education funds are diverted or 'borrowed' for other 'pressing'

concerns and are never returned. Recent reports also indicate abuse of tendering and procurement procedures that result in inflated costs and misappropriation. In some cases clear embezzlement has been reported, but as of yet those responsible have not been held to account.

At the school level, accountability is particularly poor. School budgets, receipts of funds and actual use are often not transparent or open to public scrutiny. School committees often function poorly, and rarely provide a forum for ordinary people to ask questions or hold their leaders to account.

3. Conclusion and Action Areas

Is increased funding for education making a difference? In considering this question, the discussion above has raised several measurement and conceptual concerns: namely that the quality of both education and financial data is problematic, that what matters in education is poorly conceptualized and not measured, that there may be a lag effect that needs to be considered in determining impact, and that the precise nature of cause and effect is difficult to establish. These concerns make it difficult to precisely evaluate the question of impact.

Nonetheless, there is sufficient reason to believe that the increased funding is not being prioritized for the aspects that matter the most in education.

We propose that the following action areas are critical to improve the situation:

3.1 Develop indicators to measure factors that contribute to quality learning and interaction aspects of schooling. Some of these will be more difficult to measure than others, but are nonetheless essential.

3.2 Revise/Update the education targets and indicators in the PRSP to be both more realistic and to better reflect aspects of quality. These should also include measures that demonstrate changes at the school level.

3.3 Undertake an analysis of funding for education, and in particular the use of non-PE discretionary funding, to assess whether it is being used effectively towards aspects of education that matter most. Explore ways to make the allocations more equitable, such as through the use of clear and transparent criteria.

3.4 In the same analysis determine whether adequate funds are reaching the school level and being used as intended.

3.5 Undertake an analysis of the governance of schools, with particular emphasis on the use, accounting and transparency of school funds. Examine the concrete strategies adopted by PEDP to have these aspects strengthened, assess whether they are adequate and are leading to actual implementation on the ground.

3.6 Examine ways in which routine data collection in education can be strengthened, and clarify the roles of different actors within line Ministries and local government regarding data collection.

These actions can be taken up by different actors: the PER and PRSP Research and Analysis Working Groups, and the BEDC in the first instance. Collaboration with

CSOs that can undertake the work may also be fruitful, including with REPOA, Maarifa, the University of Dar es Salaam and HakiElimu.

The conclusion and action points above are not meant to be comprehensive. This paper aims to stimulate discussion and help contribute to review of the Poverty reduction Strategy.

HakiElimu

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