



EDUCATION BUDGET BRIEF

FY 2011/12–FY 2015/16

Key messages

- » Education is one of six priority sectors for state budgeting in Tanzania. At 16.3 per cent, it receives the lion's share of the total budget. However, this does not yet meet the 20 per cent minimum set by the Global Partnership for Education.
- » Allocations to the education sector have doubled between FY 2011/12 and FY 2015/16. Actual spending has increased by 55 per cent between FY 2011/12 and FY 2014/15.
- » Recurrent spending, mostly on salaries, dominates the education sector budget. The government is committed to self-financing investments in education, with the share of actual domestic resources devoted to capital spending increasing from 26 per cent in FY 2011/12 to 85 per cent in FY 2014/15.
- » Basic education absorbs over half of the education sector budget. Allocations to this sector are expected to increase from FY 2016/17 due to the fee free basic education policy, which will include pre-primary, primary and lower-secondary education policy.¹
- » Major challenges include the low execution rate of the secondary and primary education sub-votes, and the declining execution rate of the development budget, particularly its foreign component. There are also significant geographic variations in budgetary execution rates.
- » Transfers to districts are on the rise. This trend is accompanied by significant disparities in the allocation of education resources across local governments. The extent to which these disparities contribute to the persistent variation in key education outcomes across districts is not known. However, the trends raise pertinent questions on the equity, efficiency and quality of education spending at the local level.
- » Key priorities include increasing the share of investment to improve the quality of learning and equitable distribution of teachers; enhancing education infrastructure; making expenditure efficiency gains; addressing absenteeism; reversing sub-national disparities through an enhanced equity-sensitive allocation formula; and developing cost-effective models for pre-primary expansion.
- » Tanzania spends less (as a share of GDP) on the education sector than most of its regional peers. This raises concern considering that the child population in Tanzania is expected to reach 58 million by 2050 from the current 22 million. Investments today will enable Tanzania to utilise its demographic dividend by developing the human capital necessary to sustain the country's growth trajectory in the long run.

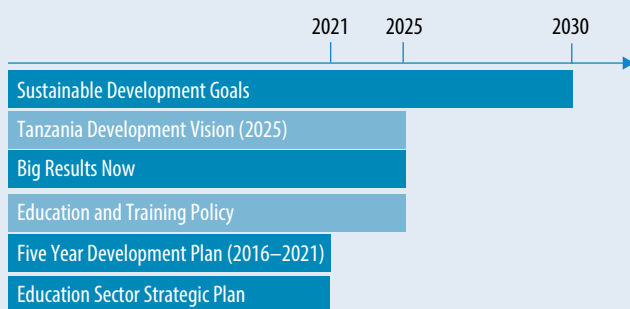
1. How is the education sector defined and guided?

The new Education and Training Policy launched in 2015 introduced 11 years of free basic education² including one compulsory year of pre-school. The recent elimination of school fees in basic education reflects Tanzania's commitments under the International Covenant on Economic, Social and Cultural Rights. Figure 1 presents the key strategic plans guiding the education sector in Tanzania.

Public spending in the education sector covers a number of education-related expenditures across several ministries, including the Ministry of Education, Science and Technology (MoEST), the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC)³, and the President's Office for Regional Administration and Local Government (PO-RALG)⁴. MoEST is responsible for the policy and strategic aspects of the education sector as a whole, and the management of higher education in particular. Managing the implementation of the Basic Education Policy is the responsibility of PO-RALG.

Education is one of the six priority sectors⁵ for state budgeting and has been one of the key sectors of the government's Big Results Now (BRN) initiative. The key strategic direction is, now provided by the Five Year Development Plan II (FYDP II) for FYs 2016/17–2020/21. Further, the Tanzania Social Action Fund's (TASAF) Productive Social Safety Net (PSSN) programme has a strong focus on making cash transfers available to more than 1.1 million extremely poor households on the condition that, inter alia, their children attend school.

FIGURE 1 FRAMEWORK OF STRATEGIC PLANS GUIDING THE EDUCATION SECTOR

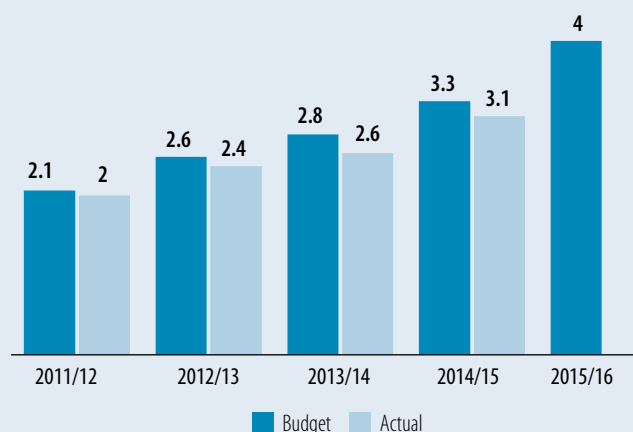


2. What trends emerge from the education sector budget?

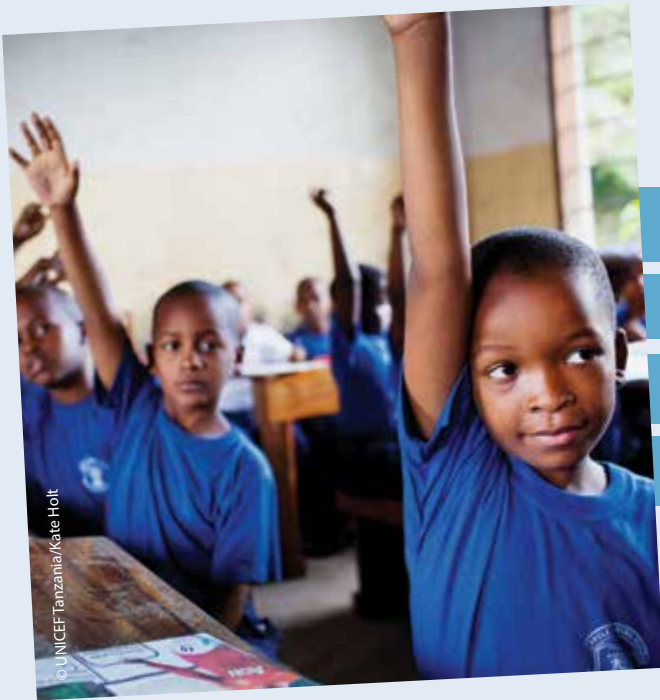
The overall state budget has been expanding at a nominal annual average rate of 19.5 per cent (and a real annual average growth rate of 10.5 per cent) over the past five years. In absolute terms, the budget has expanded from TShs 14.1 trillion (FY 2011/12) to TShs 23 trillion (FY 2015/16). The state budget to gross domestic product (GDP) ratio reached 23.9 per cent during FY 2015/16, from 21.4 per cent in FY 2011/12. Development expenditure comprises around 30 per cent of the total budget, with the remaining 70 per cent covering wages and salaries (27 per cent) and other charges (OC) (43 per cent). Domestic tax revenue has been on the rise as well, from TShs 6.5 trillion (FY 2011/12) to TShs 9.9 trillion (FY 2014/15). However, as a share of GDP, domestic tax revenues have increased marginally from 12 to 13 per cent over the same period of time⁶. Budget execution rates have been improving overtime, from 84 per cent in FY 2011/12, to 94 per cent during FY 2014/15.

The education sector has enjoyed a significantly increasing trend in both budgetary allocations and actual spending. The budgetary allocation in FY 2015/16 is nearly twice the amount allocated in FY 2011/12, while actual spending increased by 55 per cent over FYs 2011/12–2014/15 (Figure 2). This increasing financial commitment is consistent with the recommendations formulated in 2015 by the Committee on the Convention on the Rights of the Child that advocated for increasing

FIGURE 2 TRENDS IN BUDGETED AND ACTUAL SPENDING IN THE EDUCATION SECTOR (TSHs TRILLION)



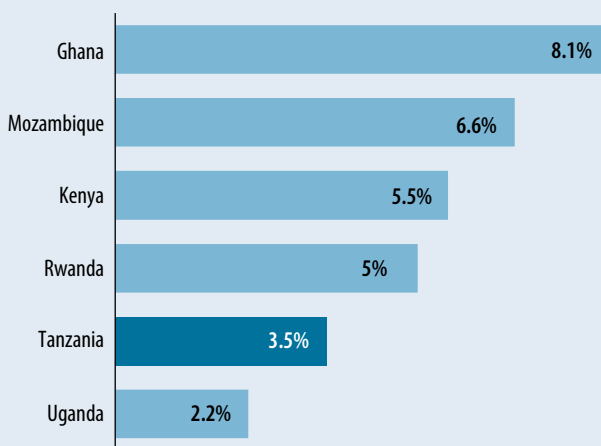
Source: UNICEF calculations based on MoFP IFMS data.



The share of the education sector budget in the total national budget remains higher than all other priority sectors.

budget allocation to education in line with the country's growing population. However, Tanzania spends relatively less on the education sector than most of its regional peers, as a share of GDP (Figure 3).

FIGURE 3 GOVERNMENT EXPENDITURE ON EDUCATION AS % OF GDP IN SELECTED AFRICAN COUNTRIES (2014)

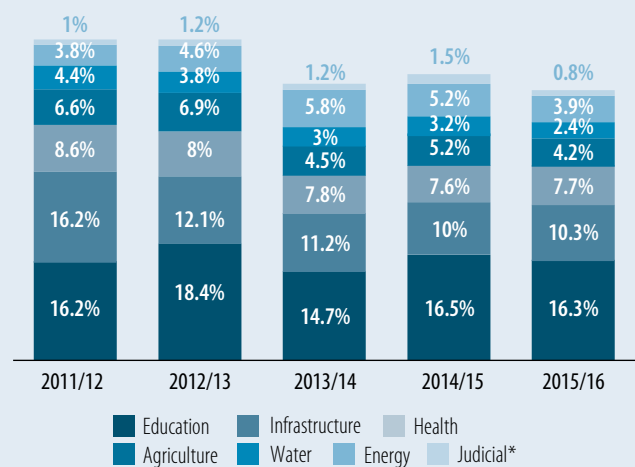


Source: World Bank World Development Indicators (2016)

The share of actual education spending within overall state spending has shown a slightly declining trend from 17.4 per cent in FY 2011/12 to 17.2 per cent in FY 2014/15. If the budget for FY 2015/16 is considered, the share is even lower at 16.3 per cent. This is lower than the 20 per cent standard proposed by the Global Partnership for Education and the 22 per cent average projected in the Education Sector Development Plan (ESDP) for the period 2008–2017. This indicates that the alignment of future sector budgets with the ESDP strategy needs to be further strengthened.

The share of the education sector budget in the total national budget remains higher than all other priority sectors. Over FYs 2011/12–2015/16, the six priority sectors comprised on average 49.5 per cent of the overall state budget. The education sector led with an average share of 16.4 per cent, followed by infrastructure at some distance with an average share of almost 12 per cent of the overall state budget (Figure 4). If the total resources allocated to the six priority sectors over FYs 2011/12–2015/16 are considered, the education sector's share has been the highest, absorbing about a third of the total.

FIGURE 4 CHANGES IN THE BUDGET SHARES OF PRIORITY SECTORS



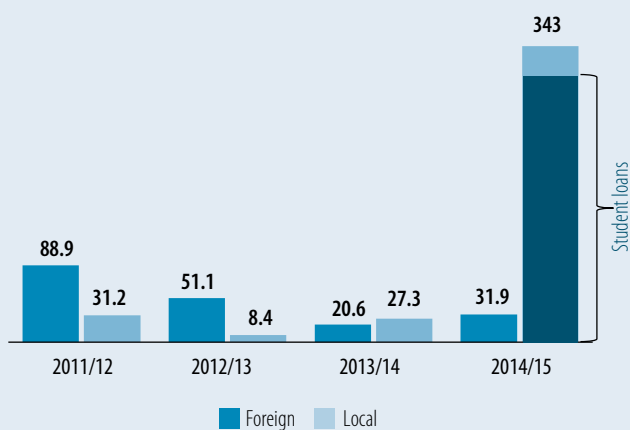
Source: UNICEF calculations based on MoFP priority sector analysis (FYs 2011/12–2015/16).

* Not a priority sector; included for comparison.

3. Where do education sector resources come from?

The government has shown increasing commitment in financing education investments, in a context of declining foreign resources. Figure 5 shows that in FY 2011/12 and FY 2012/13, foreign resources dominated the development expenditure of MoEST. Since then, the volume of local resources in financing investments in education has risen. The actual spending of local resources during FY 2014/15 is more than 12 times that in FY 2013/14. However, this sudden jump has been largely the result of the inclusion of loans to students in higher education, which used to be part of the recurrent budget but from FY 2014/15 began to be recorded in the development budget. The loans amounted to about TShs 298 billion in FY 2014/15, which indicates that there was still a significant increase in domestic investments even if loans are not considered (i.e. TShs 45 billion was allocated to investments—excluding loans—as compared to TShs 27.3 billion in the previous financial year). The declining trend in the share of foreign resources in overall education sector spending, from 74 per cent in FY 2011/12 to 15 per cent in FY 2014/15, implies that an increasing share of domestic resources goes towards financing development activities in the sector.

FIGURE 5 SOURCES OF DEVELOPMENT EXPENDITURE OF MoEST (TSHs BILLION)



Source: UNICEF calculations using MoFP IFMS data

4. How are education resources used?

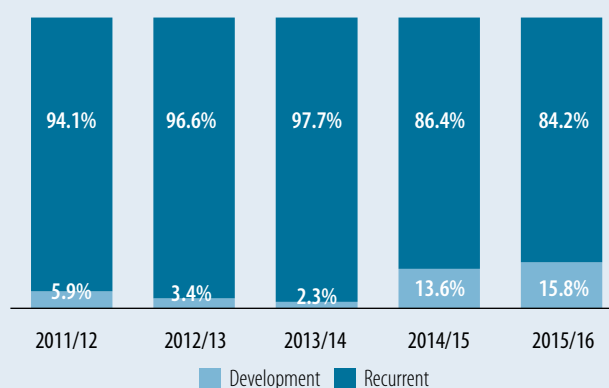
4.1 Recurrent expenditure versus investment

Recurrent resources expanded over FYs 2011/12–2013/14 and declined thereafter. But they still maintained a share of more than four fifths of the overall spending of the education sector. On the

investment side, the share of development expenditure has increased over time and averaged 6.3 per cent over the past four years for which data on actual spending are available (FYs 2011/12–2014/15) (Figure 6). The education sector is still severely affected by an acute shortage of teachers, especially for pre-primary and secondary (mathematics, science and technology). In this context, it is important that the government invests more in teacher quality and availability, starting from a more equitable distribution of teachers in order to enhance teacher utilisation. However, to reap the benefits of this investment, flow rates/efficiency indicators across the primary cycle have to significantly improve to be able to provide an adequate supply for teacher training and other colleges.

The recently launched FYDPII shows that the government will focus on aspects that require expansion of both recurrent and development resources. Selected priority areas such as improving qualified teacher-pupil ratios and the working environment for teaching staff at all levels will require increasing recurrent expenditure. Other selected priority areas such as improving the teaching and learning environment (e.g. classrooms, desks, latrines/toilets) and improving access to teacher housing will all demand increasing allocations to the development component of the budget. Quality of education has also been well reiterated at the highest levels of government⁷. As with many other countries, Tanzania has expanded education by introducing the 11-year basic cycle (including one year of pre-primary). However, children still need to sit exams at the end of primary and lower secondary school, although many countries have now eliminated end-of-primary exams.

FIGURE 6 EVOLVING SHARES OF RECURRENT AND DEVELOPMENT EXPENDITURE IN THE EDUCATION SECTOR



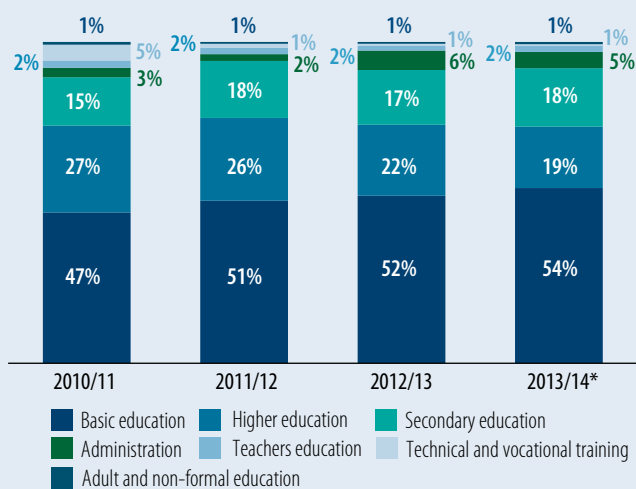
Source: UNICEF calculations from MoFP IFMS data

The total wage bill (i.e. personal emoluments and allowances) continued to increase as a share of the total education budget, standing at 64 per cent in FY 2013/14. Basic salaries accounted for 97 per cent of total wage costs, the vast majority of which were at decentralised level (i.e. for basic and secondary education). Primary education is dominant in recurrent expenditure, accounting for 71 per cent of the total wage bill (compared to 54 per cent of the total sector budget), with secondary education accounting for 25 per cent (compared to 18 per cent of total sector budget). The wage bill is expected to increase further in the next five years (FYs 2016/17–2020/21) as the government, through FYDP II, plans to provide commensurate remuneration for teaching staff in order to improve the quality of education.

4.2 Expenditure by programme area

The basic⁸ education budget—financed by MoEST and PO-RALG resources—enjoys the largest and growing share of the education sector spending (Figure 7). The highest return on investment is in early education, as it sets strong foundations for all future learning. Yet, pre-primary education funding has been limited. Increased investment in pre-primary and early primary education is a key way to improve efficiency of spending.

FIGURE 7 CHANGES IN EDUCATION SUB-SECTORS' ACTUAL SPENDING OVERTIME



Source: 2013 Education Rapid Budget Analysis.
* Budgeted figures

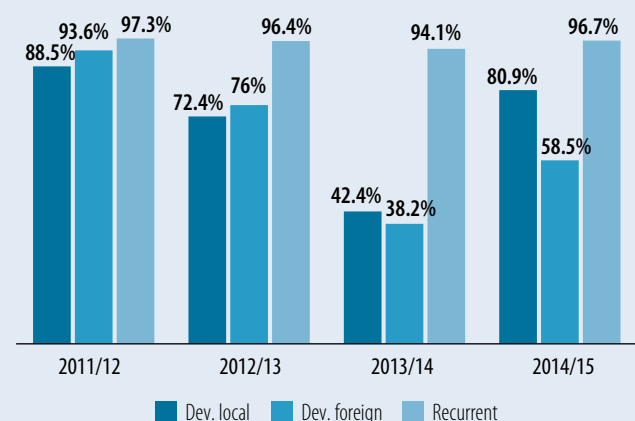
The spending share devoted to secondary education has slightly increased while spending for higher education and technical and vocational training has declined significantly. Allocations to basic education are expected to further increase from FY 2016/17 due to the expansion of basic education, which now includes one year of pre-primary and four years of lower secondary education; the provision of free basic education; and the government's intention to abolish all indirect student contributions⁹. Less than 1 per cent of the MoEST budget is allocated to the sub-vote 'primary education' based on the fact that, since 2011, most of the primary education resources have been channelled through PO-RALG.

The vast majority of funds within MoEST go to higher education, teacher education, and technical and vocational training. Spending in the secondary education sub-vote within MoEST has been on the rise, from TShs 3.6 billion in FY 2011/12 to TShs 11.3 billion in FY 2014/15. There are some positive gains in vocational and technical training. Enrolment in colleges in that sub-sector has increased substantially, from 4,641 in 2000/2001 to 145,511 in 2012/13¹⁰. This increase can partly be attributed to increased spending on vocational and technical training. Enrolment in government higher learning institutions has also been growing, reaching 154,393 students by FY 2014/15 from 83,828 during FY 2009/10. Despite this progress, the still limited amounts spent on vocational education and increasing population growth call for more attention to the sub-sector.

5. How well has the sector executed past budgets?

The education sector has demonstrated a good execution rate in its recurrent budget over the past five years, with an average rate of 96.1 per cent. However, the education sector's development budget is characterised by much lower execution rates, particularly its foreign component (Figure 8). The main challenges are the delay in the transfer of resources from the centre to the beneficiary units, and overall limited absorptive capacity by the sector. This creates concerns considering that the poor learning environment (e.g. inadequate/insufficient buildings and desks, as well as lack of teachers' houses) constitutes a key challenge for improving education outcomes. The lack of housing for educators, for instance, is one of the reasons why the best teachers remain in urban areas. In rural areas, classes tend to be very large in size because teachers are reluctant to teach where there is no housing or other social amenities.

FIGURE 8 EXECUTION RATE OF THE DIFFERENT COMPONENTS OF THE EDUCATION SECTOR BUDGET

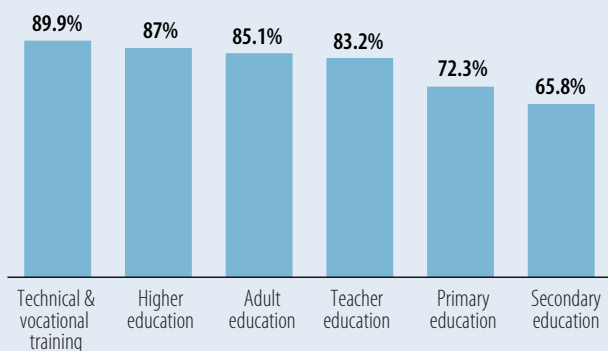


Source: UNICEF calculations from MoFP IFMS data

Secondary school teachers in rural areas however often have very low teaching loads (they are underutilised) because the rate of transition from primary to secondary is low.

Within MoEST resources, the primary and secondary education sub-sectors have the lowest execution rates (Figure 9), with an average rate of 72 per cent and 66 per cent, respectively, over FYs 2011/12–2014/15. Low spending both in terms of recurrent and development resources creates significant challenges to enhancing learning outcomes.

FIGURE 9 AVERAGE EXECUTION RATES ACROSS MoEST SUB-VOTES (FYs 2011/12–2014/15)



Source: UNICEF calculations based on MoFP IFMS data

At sub-national level, most regions (23 out of 25) recorded an execution rate (recurrent and development) above 85 per cent during FY 2012/13¹¹. Three regions (Kilimanjaro, Iringa and Kigoma) reported an execution rate of almost 100 per cent. Others experienced lower rates, with Geita being an outlier with an execution rate of merely 39 per cent. PO-RALG data revealed a wide

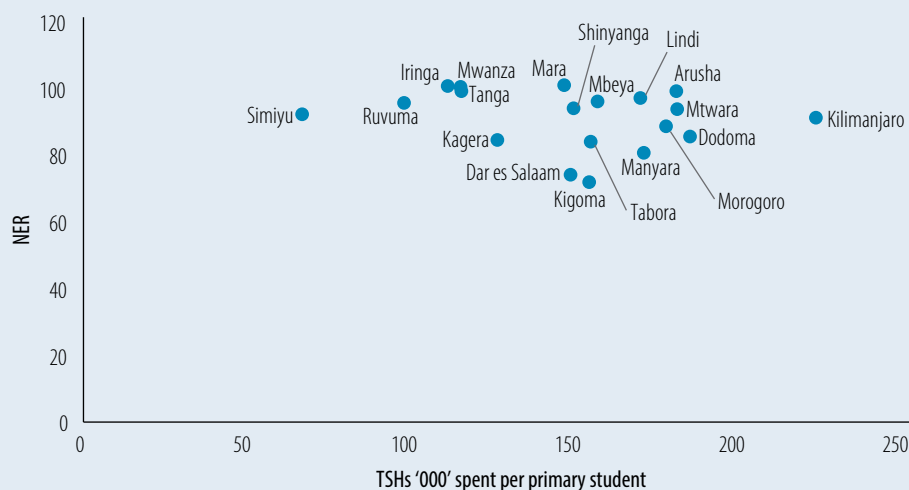
variation in the education budget execution rates among districts too, ranging from a low of 21.6 per cent in Bahi district to a high of 121.4 per cent in Lushoto district¹².

6. Decentralisation and equity in resource allocation

Fiscal decentralisation is deepening, with actual education transfers to districts growing from TShs 1.3 trillion in FY 2011/12 to TShs 2.2 trillion in FY 2014/15 (TShs 2 trillion were budgeted in FY 2015/16), with wide variations among districts. If during FY 2011/12, 63 out of each TShs 100 spent in the sector went to the districts, by FY 2014/15 this had increased to TShs 71. About 90 per cent of such transfers are recurrent with the remaining portion going to development projects. In terms of funding source, for FY 2014/15, out of the TShs 26.2 billion of actual development spending (transfers to districts), TShs 25.9 billion came from foreign resources (99 per cent). Significant disparities characterise allocations across local government authorities (LGAs), with Kahama district receiving the highest per capita recurrent allocation (TShs 405), compared to TShs 105.7 in Korogwe town council (lowest) in FY 2014/15. Allocations to LGAs are based on an outdated formula, which tends not to be consistently applied. The wide variation in spending across districts could affect the quality of service delivery and thereby education outcomes¹³. Resources at the local level for education still appear to be inadequate, resulting in insufficient capitation grants and delays of such grants reaching schools on time.

Key education outcomes display significant variations at the regional level. Figure 10 shows a diversified picture in this regard. Regions with lower net enrolment ratio (such as Kigoma and Dar es Salaam) receive less funding than

FIGURE 10 NER IN 2013 AND SPENDING PER PRIMARY SCHOOL STUDENT (FY 2012/13)



Source: MoEST 2013 Basic Education Statistics Tanzania and 2013 Education Rapid Budget Analysis

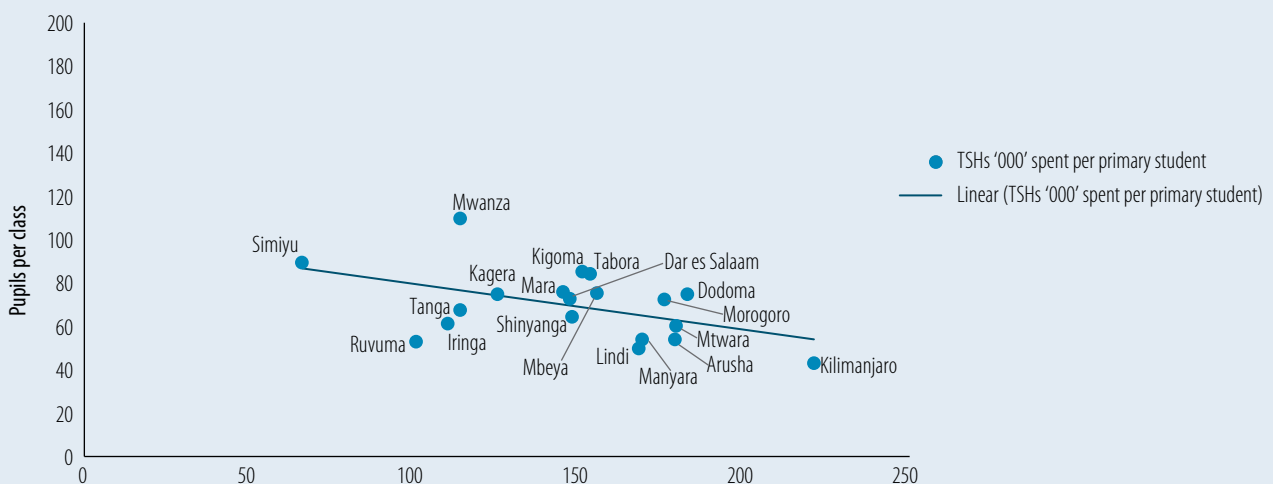


In order to achieve sector goals, it is essential to invest in improving access to quality pre-primary education.

some better performing regions (such as Kilimanjaro). However, at the same time, other regions (Simiyu and Ruvuma) performed well despite a relatively low level of spending, and some regions with a relatively high level of spending did not necessarily have a high NER (Dodoma). Further Iringa, which is the region with the highest NER (99.7 per cent), is the third lowest spending region in the country. This suggests that the quality of spending and efficiency considerations also play an important role in

determining education outcomes. Regional variations in school infrastructure are also significant, with some degree of correlation with spending as shown by Figure 11, where higher spending is associated with a lower pupil per class ratio. However, issues of quality of spending and efficiency are also relevant. For instance, Manyara, has a similar pupil per class ratio as Ruvuma, but spent TShs 69,000 more per student than Manyara¹⁴.

FIGURE 11 PUPIL PER CLASS RATIO (PRIMARY EDUCATION) IN 2013 AND SPENDING PER PRIMARY SCHOOL STUDENT (FY 2012/13)



Source: MoEST 2013 Basic Education Statistics Tanzania and 2013 Education Rapid Budget Analysis

7. How has public expenditure on education impacted sector performance?

The primary completion rate in Tanzania (74 per cent) is higher than both the averages for sub-Saharan Africa (69 per cent) and low income countries (71 per cent)¹⁵. There is an efficiency aspect to be considered when the completion rate and spending per primary school student in Tanzania are compared with those in other countries in the region. Tanzania spent about US\$ 97 per primary school student in FY 2012/13 and achieved a 74 per cent completion rate, which is higher than the 69 per cent sub-Saharan Africa average where an average of US\$ 211 is spent per student. For instance, Mozambique spends around US\$ 91 per primary student, which does not differ much from Tanzania's level of spending and has a far lower completion rate (48 per cent¹⁶). In addition to a relatively better completion rate in primary school (standing at 56.3 per cent in 2014), the elimination of primary school fees in 2001 saw the country experiencing an increase in NER from 59 per cent in 2000 to 84.4 per cent in 2014¹⁷.

Significant progress has been made to improve access to primary education but important challenges persist, particularly in quality learning. Despite the positive progress in primary enrolment, the earlier increase in NER (from 89 per cent in 2003 to 97 per cent in 2007) could not be sustained and declined to 84.4 per cent in 2014. Furthermore, most children, especially those in rural areas, are entering primary school poorly prepared due to the lack of access to early stimulation, poor nutrition and the low quality of pre-primary education. While most children attend school, they are not achieving foundational learning outcomes, which determine future performance. Although boys and girls have equal access to education, there are clear regional disparities, with NER ranging from 99.7 per cent in Iringa to 72.9 per cent in Kigoma in 2013. The poorest and most marginalised children are also failing to access and complete basic education; primary school aged children from the lowest wealth quintile are three times less likely to attend school than those from the highest wealth quintile¹⁸.

Secondary school enrolment has improved significantly from 6.7 per cent in 2003 to 32.7 per cent in 2014, for ages 14 to 17 years. The lower secondary education completion rate also improved from 14.2 per cent in 2008 to 35.1 per cent in 2013¹⁹. However, the completion rate remains behind the sub-Saharan African and lower income country averages²⁰. Cross-country data from the World Bank's World Development Indicators show that only 35.1 per cent of Tanzanian youth completed lower secondary education in 2013, compared with an average of 39.2 per cent in low income countries and 37.9 per cent in sub-Saharan Africa. Tanzania, however, has performed

far better than neighbouring Malawi (21 per cent), Mozambique (23 per cent), Burundi (23 per cent), Rwanda (27 per cent) and Uganda (29.4 per cent).

Gender disparities persist in enrolment rates for secondary education. Despite the achievement of gender parity in primary education, gross enrolment in secondary indicates that boys have greater access than girls. In 2013, gross enrolment ratios were 47.2 per cent for boys compared to 43.8 per cent for girls for the first four years of secondary education, and significantly lower for advanced secondary school (5.9 per cent for boys and 2.6 per cent for girls).

Conclusion

Education remains a priority sector, absorbing the largest portion of public resources, although its share of the state budget has been slightly declining. The majority of education funds benefit basic education and came through the recurrent budget, although capital spending rose over time, increasingly funded by local resources. About three quarters of the education sector budget is decentralised. Low budget execution rates remain an issue, largely due to limited absorptive capacity by the sector, and limited predictability and timeliness of foreign funding's disbursements.

Significant progress has been achieved in key education outcomes. However, wide variations across regions and districts persist reflecting geographic variation in spending, as well as issues of quality and efficiency of expenditure. Further, only 34.4 per cent of 5 and 6-year-olds have access to pre-primary education²¹; 3.5 million school-age children remain out of school, and of the 2 million children who are out of primary school, 58 per cent are from the poorest 20 per cent of households²²; only 8 per cent of Standard 2 children can read with comprehension²³ and only 35 per cent of children successfully complete primary education (a third drop out and a third fail).

In order to achieve sector goals, it is essential to invest in improving access to quality pre-primary education, including developing cost-effective models for pre-primary expansion; reducing the number of out-of-school children through a comprehensive multi-sectoral programme; and investing in teachers (their availability, quality training, equitable distribution and motivation), especially for schools in remote rural areas.

Like state government expenditures on the physical foundations of economic activity, expenditures on the social foundations of economic activity—education in particular—shape the course of the economy long into the future. Quality education, particularly if started at an early age, provides the skills needed for labour, which in turn enhances productivity and future growth.

ACRONYMS

BRN	Big Results Now
BEST	Basic Education Statistics Tanzania
ESDP	Education Sector Development Plan
FY	Financial Year
FYDP	Five Year Development Plan
GDP	Gross Domestic Product
IFMS	Integrated Financial Management System
LGA	Local Government Authority
MDAs	Ministries, Departments and Agencies
MoEST	Ministry of Education, Science and Technology
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MoFP	Ministry of Finance and Planning
NER	Net Enrolment Ratio
OC	Other Charges
PO-RALG	The President's Office for Regional Administration and Local Government
PSSN	Productive Social Safety Net
RBA	Rapid Budget Analysis
TASAF	Tanzania Social Action Fund
TShs	Tanzanian Shillings

GLOSSARY OF BUDGET TERMS

Budget execution: The ratio of actual spending over approved estimates.

Consolidated Fund Service: Government resources to pay for debt servicing and state house expenses.

Development budget: Government resources that are intended for investment purposes.

Expenditure (actual figures): Allocated funds spent on investment and recurrent costs (versus *budgeted figures*, which refer to allocation of funds, approved by Parliament).

Fiscal decentralisation: The devolution of financial resources by the central government to sub-national governments for financing specific functions.

Foreign grants: Financial aid from foreign countries and aid agencies that the recipients do not need to pay back.

Nominal values: Numbers not corrected for the effect of inflation over time.

Non-tax revenue: Income earned by the government from sources other than taxes.

Other charges: Non-salary expenses (excluding investment).

Per capita: Per person.

Real values: Numbers corrected for inflation.

Recurrent budget: Government resources that are intended for salaries and wages, and non-salary expenses (excluding investment related expenses).

Tax revenue: Income earned by the government from taxes.

Treasury bonds: Debt instruments issued by the government in exchange for money borrowed from the public.

END NOTES

- ¹ “Basic” education now spans pre-primary, primary and lower-secondary education (compared to only primary education).
- ² Universal basic education of 11 years will consist of one year of pre-primary education, six years of primary (or Cycle 1), and four years of lower secondary (or Cycle 2).
- ³ Former Ministry of Health and Social Welfare.
- ⁴ This is how education spending is defined in this brief, unless otherwise stated.
- ⁵ The budgets for these six sectors are explicitly indicated in the MoFP annual state budget presentation to the Parliament. These sectors are energy and minerals, infrastructure, agriculture, education, health, and water. The judicial sector has been added for comparative purposes.
- ⁶ World Bank, 2016, *Tanzania Economic Update: The Road less Travelled: Unleashing Public Private Partnerships in Tanzania*. World Bank. Washington.
- ⁷ Speech by the President of the United Republic of Tanzania, H.E. John Pombe Magufuli, officially inaugurating the 11th Parliament of the United Republic of Tanzania, Dodoma, 20th November, 2015.
- ⁸ Under the old policy (still what is implemented for the duration of FY 2015/16), basic education refers to primary schooling. Under the new policy (starting in FY 2016/17), basic education includes pre-primary, primary and lower secondary.
- ⁹ Speech by the President of the United Republic of Tanzania, H.E. John Pombe Magufuli, officially inaugurating the 11th Parliament of the United Republic of Tanzania, Dodoma, 20th November, 2015.
- ¹⁰ 2014 Education and Training Policy.
- ¹¹ RBA Education 2013.
- ¹² RBA, Education, 2013.
- ¹³ UNICEF, 2014, *Statistical Update, World AIDS Day, Dar Es Salaam, Tanzania*.
- ¹⁴ MoEST, 2013, Basic Education Statistics, Tanzania.
- ¹⁵ World Bank, 2016 World Development Indicators.
- ¹⁶ Completion rate data are sourced from the World Bank World Development Indicators, whereas the spending per primary school student data is sourced from the Education RBA (2013). Other African countries’ spending data per primary school students are sourced from UNICEF (2015).
- ¹⁷ MoEST
- ¹⁸ URT (2013). *HIV/AIDS and Malaria Indicator Survey 2011–12*, NBS, Dar es Salaam, Tanzania.
- ¹⁹ World Bank, 2016 World Development Indicators.
- ²⁰ Ibid.
- ²¹ Pre-primary, Primary and Secondary Education Statistics 2014.
- ²² Household Budget Survey (HBS) 2011/12.
- ²³ HBS, 2011/12; National Baseline Assessment for the 3Rs in Tanzania, 2014.

