

# CHAPTER 1

## THE CONTEXT OF THE EDUCATION SECTOR

This chapter provides an overview of the demographic and macroeconomic contexts of the Tanzanian mainland education sector. It assesses the demographic pressure the education system faces firstly by deriving the magnitude of the potential demand for education services (the number of children of official school age for basic and postbasic education) from demographic trends; and secondly by analyzing socioeconomic factors that affect this demand, such as the incidence of poverty and the impact of HIV/AIDS on school participation and the delivery of education services.

These demographic and macroeconomic constraints can be overcome in part through a policy of increasing resources for the education sector (the efficient use of education resources is a second necessary policy approach, dealt with in subsequent chapters). The chapter therefore then reviews central government financing of the sector, distinguishing between revenues and external resources, and details the magnitude and composition of government education expenditures to appraise the level of budget priority given to the sector. Finally, the scope for increasing public resources for the education sector is briefly discussed.

## The Demographic and Social Contexts

### ● Demographic Trends

Since the independence of The United Republic of Tanzania in 1964, four population censuses have been carried out. The first found that the population was 12.3 million, in 1967, and in 2002, the fourth and latest found that the population had grown to 34.4 million.

The most recent population projections were performed by the National Bureau for Statistics (NBS) in 2006, based on the 2002 census, for the period from 2003 to 2025 (NBS, 2006). A close look at these projections shows that some single-age groups experience erratic trends. In 2010 for instance, there is a considerable drop (approximately 20 percent) between the total number of children aged seven years (1.3 million) and those aged eight years (1.1 million). This difference then remains apparent for consecutive ages. The projections also show exceptional and apparently unrealistic growth rates for some single-age groups for given years. For example, 25 percent annual growth is projected for the one year age-group in 2004, the seven years age-group in 2010, and the 14 years age-group in 2017.

This raises an issue of data quality, which is crucial for future planning, because even slight errors could distort the estimation of resources needed (due to a higher expected demand for education, for example). The erratic trends observed in NBS population projections have therefore been smoothed (See Annex Note 1.1 for the methodology used), and are referred to as the NBS-corrected data, and used in this report. Selected demographic indicators for Tanzania are summarized in Table 1.1 below.

**Table 1.1: Demographic Trends in Tanzania, 1967-2002 and Projections through 2020**  
*Selected Indicators*

	Census-Years				NBS-Projections		
	1967	1978	1988	2002	2010	2015	2020
Population (millions)	12.3	17.5	23.1	34.4	43.2	49.9	57.1
Inter-census Growth Rate (%)	3.2	2.8	2.9	2.9	2.7	2.5	n.a.
Sex Ratio (number of boys per 100 girls)	95.2	96.2	94.2	96.0	96.9	97.9	98.6
Life Expectancy at Birth (years)	42	44	50	51	n.a.	n.a.	n.a.
Total Fertility Rate (number of births per woman)	6.6	6.9	6.5	6.3	5.1	4.5	3.9
Crude Birth Rate (per 1,000 individuals)	47.0	48.0	46.0	43.0	39.3	35.2	31.5
Crude Death Rate (per 1,000 individuals)	24.0	19.0	15.0	14.0	13.5	12.3	11.7
Infant Mortality Rate (per 1,000 live births)	155	137	115	95	80	72	65
Population Under 15 Years (% of total)	—	—	—	46.5	44.4	44.6	44.2
Urban Population (% of total)	6.4	13.8	18.3	23.1	26.3	28.1	29.7
Population Density (population per km <sup>2</sup> )	14	20	26	39	49	57	65

Source: NBS data and projections (NBS, 2006; URT, 2005); and authors' estimates.

*Even if the country is undergoing a demographic transition, the overall population growth rate remains high.* Tanzania's population in 2010 was estimated at 43.2 million,<sup>3</sup> up from 12.3 million in 1967, which implies that the demographic growth rate averaged three percent per year over the period. The growth rate has declined since 1967 (down from 3.2 percent) due to a decrease in the fertility rate (fewer births per woman) and is projected to reach 2.5 percent between 2015 and 2020, a figure that nevertheless remains higher than the current average for Sub-Saharan African low-income countries (2.3 percent). The Tanzanian population is expected to increase by 32 percent over the next ten years to reach 57.1 million inhabitants by 2020.

*The country still faces high demographic pressure on its education system,* as a result of another important aspect of the Tanzanian population, the relatively high proportion of youth. In 2010, 44.4 percent of Tanzanians were under 15 years, compared with the Sub-Saharan African average of 43.1 percent (See Table 1.2 below). This figure is projected to remain fairly constant for the next 10 years, implying that the overall demographic pressure on the education system will remain high. For example, the primary school-aged population (aged seven to 13 years), for Mainland Tanzania is projected to reach 10.2 million by 2020. Given that 8.44 million children were enrolled in all primary schools in 2009, this implies that the places offered by the primary education system will have to expand by 21 percent by 2020.

**Table 1.2: International Comparison of Demographic and Social Trends, 2008 or MRV**  
*Selected Indicators*

	Tanzania	Africa	
		LICs	All Countries
Total Population (millions)	<b>40.8</b>	<b>19.5</b>	<b>18.6</b>
Average Population Growth Rate 2005-10 (%)	<b>2.9</b>	2.6	2.3
Total Fertility Rate (number of births per woman)	<b>5.6</b>	5.2	4.6
Population Under 15 Years (% of total)	<b>44.7</b>	43.1	40.6
Preschool-aged Population (% of total)	<b>6.0</b>	9.7	8.4
Primary School-aged Population (% of total)	<b>18.5</b>	17.0	15.8
O-Level School-aged Population (% of total)	<b>8.9</b>	7.8	7.4
A-Level School-aged Population (% of total)	<b>4.1</b>	6.2	6.2
Urban Population (% of total)	<b>25.5</b>	34.1	39.1
Population Density (population per km <sup>2</sup> )	<b>46.3</b>	46.1	33.6
Poverty Rate (% of population below the national poverty line) *	<b>33.4</b>	52.8	47.4
Prevalence of HIV/AIDS in Adults in 2007 (%)	<b>6.2</b>	4.0	4.5

Source: NBS data and Table 1.1 for Tanzania and authors' estimates based on the African Economic Outlook data and statistics and Pôle de Dakar data and statistics for other countries.

Note: \* Data is for 2007 for Tanzania, and 2004 or most recent year available for other countries.

### ● Socioeconomic Factors

*There are also several socioeconomic factors affecting this demographic pressure.* Firstly, the Tanzania Demographic and Health Survey of 2004/05 estimated that approximately 8.5 percent of children aged under 15 years had lost one of or both their parents (NBS, 2005), representing about 1.63 million children in 2010. These children's demand for education is very fragile, even in a context where primary education is free. This occurs for many reasons, including the need for household labor or to care for younger siblings. Secondly, the greater part of the population lives in rural areas (74 percent, compared with an average of 66 percent for Sub-Saharan Africa). Thus rural population growth has a knock-on effect on the education system through the higher resulting cost of service delivery (due for instance, to the incentives to attract or retain teachers).

*Poverty remains a considerable socioeconomic issue in Tanzania.* According to the Household and Budget Surveys (HBS), although the percentage of the total population living below the basic needs poverty line has decreased from 39 percent since 1992, it still remained at a relatively high 33 percent in 2007. In absolute terms, poverty has in fact increased: there were 12.8 million poor in 2007, compared with 11.7 in 2001, representing an increase of 1.1 million poor over the six year period. Nevertheless, Tanzania compares favorably with other low-income countries in Africa, where the poverty rate averages 53 percent. Tanzania's Human Development Index of 0.530 is considered "average"<sup>4</sup> and gives the country a ranking of 151 out of 182 countries, placing it slightly above Sub-Saharan Africa.<sup>5</sup>

*HIV/AIDS is also an important issue, given the prevalence of infection among the adult population (6.2 percent in 2007), higher than in other African low-income countries. The threat comes from the country's location in a region where the HIV rate is among the highest in the world: the average Southern African Development Community (SADC) countries' prevalence rate is estimated at 12.1 percent, indicating that Tanzania's HIV infection rate will likely increase in the future, due to greater migrations within the subregion. Uganda's experience on the other hand shows that HIV rates can be controlled and reduced, even rapidly, when effective policies are implemented.*

The HIV pandemic can affect the supply of and demand for education services. On the demand side, the children of infected parents are likely to become orphans in need of guardians. When a family takes in an orphan, household resources must be spread more thinly, and required education expenditure needs will increase. In general, children are more likely to drop out of school in families living with HIV/AIDS, because of the need to stay at home to care for sick parents for instance. On the supply side, teachers are as likely to be infected by HIV as the whole Tanzanian population. Given the current number of teachers in primary education (about 160,000), assuming that 6.2 percent of them are HIV positive implies that approximately 10,000 teachers are infected.<sup>6</sup> According to the available international research, this implies that about 1,000 teachers are likely to need replacing each year due to high illness-related absenteeism and that a further 1,000 teachers are prone to sudden AIDS-related death every year. It is only reasonable to account for the expected high attrition rate among the teaching force by recruiting and training more teachers.

## The Macroeconomic Context

*Tanzania demonstrates an impressive and sustained economic performance. Over the 1998-2010 period for which data are available, the GDP at current prices (T Sh) has increased by a factor of 5.2 (See Table 1.3 below). However, after accounting for inflation (at an average annual rate of 8.2 percent over the period), GDP at constant prices has increased by a factor of 2.1, denoting good national economic performance in real terms. For instance, over the 2000-08 period, the average annual economic growth rate was estimated at 7.1 percent, a higher figure than the African low-income countries' average, of 6.2 percent.*

**Table 1.3: Gross Domestic Product, (FY) 1998/99-2008/09 and Projections<sup>7</sup>**  
*GDP and GDP per Capita*

	GDP			Population (millions)	GDP per Capita			Annual GDP Growth (%)
	Current T Sh (billion)	GDP Deflator (2001=100)	Constant 2001 T Sh (billion)		Current T Sh	Constant 2001 T Sh	Current USD	
1998/99	6,284.0	79.2	7,938.6	30.0	209,466	264,620	314	—
1999/2000	7,222.6	88.3	8,181.7	30.9	233,740	264,779	314	3.1
2000/01	8,152.8	95.0	8,585.3	31.9	255,573	269,133	319	4.9
2001/02	9,100.3	100.0	9,100.3	32.9	276,604	276,604	316	6.0
2002/03	10,444.5	107.1	9,752.2	33.6	310,848	290,243	323	7.2
2003/04	12,107.1	116.1	10,423.7	33.8	357,714	307,978	344	6.9
2004/05	13,971.6	124.3	11,239.7	34.9	400,369	322,085	367	7.8
2005/06	15,965.3	132.3	12,068.1	36.0	443,463	335,211	393	7.4
2006/07	17,941.3	139.3	12,881.2	37.1	483,160	346,891	386	6.7
2007/08	20,948.4	151.8	13,801.9	38.3	547,081	360,446	436	7.1
2008/09	24,754.5	166.9	14,828.3	39.5	627,097	375,642	524	7.4
2009/10 *	29,369.3	188.7	15,562.9	40.7	721,902	382,537	545	5.0
2010/11 **	32,848.4	199.8	16,442.0	41.9	783,704	392,276	565	5.6
2011/12 **	36,681.8	209.0	17,550.2	43.2	849,719	406,543	591	6.7
2012/13 **	41,392.6	219.5	18,861.0	44.4	931,433	424,418	628	7.5
2013/14 **	46,704.4	230.4	20,268.0	45.7	1,021,321	443,215	667	7.5
2014/15 **	52,715.9	242.0	21,787.4	47.0	1,120,727	463,194	710	7.5

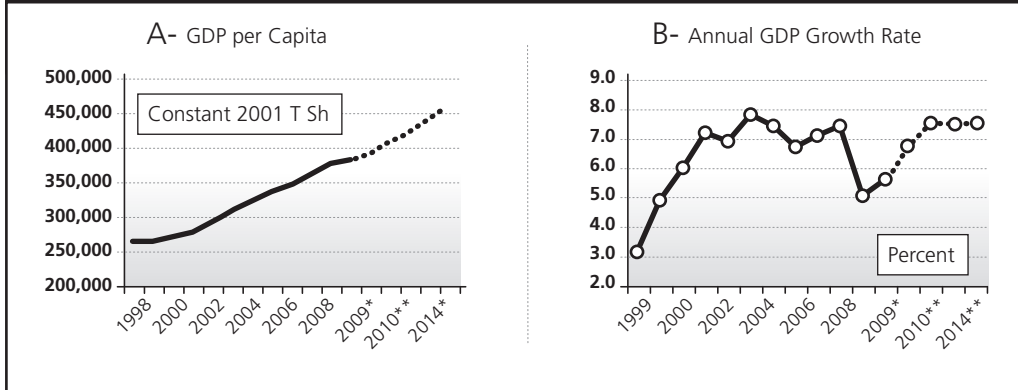
Source: Authors' calculations based on various data and reports (URT, 2007, 2008, 2009a, 2009b; NBS, 2006, 2007); MoFEA and IMF projections for 2009-14.

Note: \* Estimates; \*\* Projections as of October 2009.

This economic performance translates into 3.3 percent average annual real GDP per capita growth since 1998. The volume of GDP per capita has therefore increased by almost 50 percent since 1998, as shown in Figure 1.1 below, although GDP per capita remains very low according to international standards. In fact, the level of GDP per capita in FY 2010/11 was T Sh 784,000 or approximately US\$ 565, compared with an average of US\$ 800 for African low-income countries. From this perspective, it is necessary to ensure higher and sustained economic growth rates.

Available projections suggest that after the decrease in economic growth in 2009 and 2010 (rates of approximately 5.0 to 5.6 percent) due to the adverse impact of the international financial and economic crisis,<sup>8</sup> the Tanzanian economy's growth rate is expected to reach an average of 7.5 percent between 2012 and 2014, owing to the expected recovery in the global economic outlook (See Figure 1.1-B below).

Figure 1.1: GDP Trends (FY) 1998/99-2008/09 and Projections



Source: Based on Table 1.3.

Note: \*\* Projections.

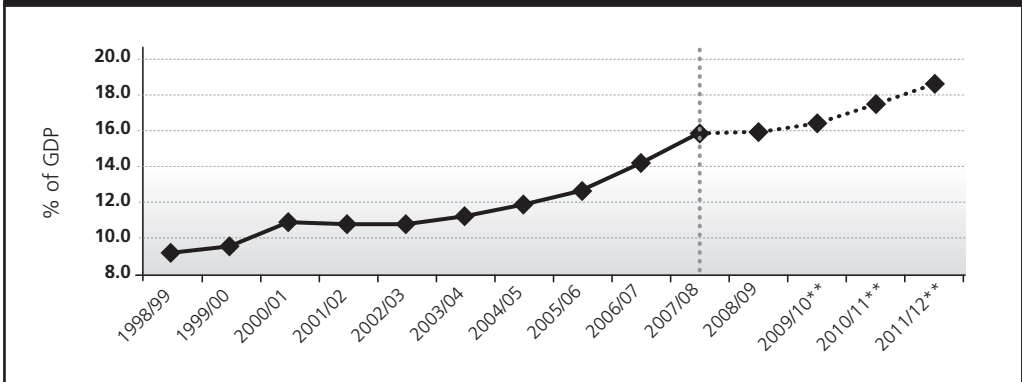
## Government Finance

### ● Government Revenues

The government has increased its mobilization of resources over the past ten years. In fact, total government revenues have increased continuously since 1998, as shown in later Table 1.4. Indeed, as a percentage of GDP, revenues more than doubled from 11.5 percent in FY 1998/99 to 25.6 percent in FY 2008/09. This trend is the result of a combination of increased domestic revenues and higher net inflows of external resources. Specifically, the volume of domestic revenues almost tripled between FY 1998/99 and FY 2008/09. As a percentage of GDP, this positive trend is also significant, given the increase from 9.2 percent in FY 1998/99 to 15.9 percent in FY 2008/09 (See Figure 1.2 below), confirming that the government has been able to mobilize significant resources directly through national income. This is partly due to the good global economic performance of the country as described above, and to greater efficiency in tax collection.

Figure 1.2 below shows that after a period of relative stability of domestic revenues as a percentage of GDP in 2009 (due to the adverse impact of the financial and then economic crises), domestic revenues are expected to increase progressively to 18.6 percent of GDP in FY 2011/2012. Nevertheless, it is estimated that the domestic revenues of countries with similar levels of economic development to Tanzania (in terms of GDP per capita) should represent between 19.2 and 20.9 percent of GDP (See Figure 1.3 below).

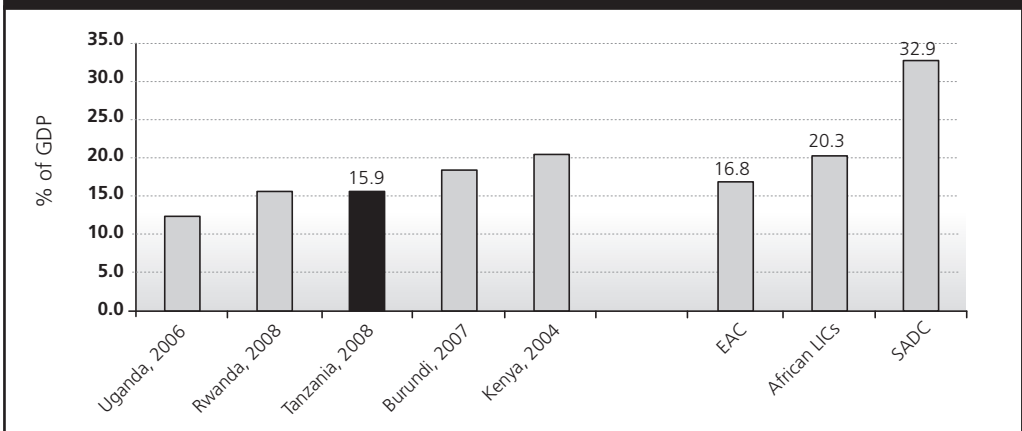
**Figure 1.2: Trends in Domestic Revenues (Not Including Grants), (FY) 1998/99-2008/09 and Projections**  
Percentage of GDP



Source: Table 1.4, MoFEA projections for FY 2009/10 to FY 2011/12 and Authors' calculations.  
Note: \*\* Projections.

*Tax collection remains fairly low compared with regional standards.* The efficiency in tax collection needs to be strengthened and the tax base increased given that overall domestic revenues remain below those of comparable low-income countries (See Figure 1.3). For instance, domestic revenues for all African low-income countries represented 20.3 percent of GDP in 2008 on average, whereas those of the East African Community countries averaged 16.8 percent of GDP.

**Figure 1.3: Domestic Revenues (Not Including Grants), Selected Countries and Subregions, 2008 or MRY**  
Percentage of GDP



Source: Table 1.4 for Tanzania and Pôle de Dakar-UNESCO/BREDA for other countries.

Note: The level of GDP per capita in 2008 is US\$ 455 for Uganda, US\$ 465 for Rwanda, US\$ 524 for Tanzania, US\$ 138 for Burundi and US\$ 838 for Kenya. The average for the EAC is US\$ 572.



**Table 1.4: Overall Government Revenue, (FY) 1998/99-2009/10**

	Domestic Revenues				External Resources (Net Inflows) *				Total **	
	Current T Sh (bn)	Constant 2001 T Sh (bn)	Per Capita (2001 T Sh)	% of GDP	% of GDP	Per Capita (US\$)	% of Total Revenues	Grants (% of Total External Funding)	Current T Sh (bn)	% of GDP
1998/99	622.5	724.8	23,804.3	9.2	2.2	7.0	19.5	# 112.4	773.7	11.5
1999/00	722.7	768.9	24,488.4	9.4	5.0	15.9	34.8	72.7	1,108.4	14.4
2000/01	929.6	929.6	28,691.4	10.8	4.4	13.9	28.8	76.0	1,306.3	15.1
2001/02	1,042.9	981.8	29,527.2	10.7	5.1	16.4	32.5	75.7	1,544.6	15.8
2002/03	1,217.5	1,063.2	31,528.7	10.8	7.0	23.5	39.5	78.3	2,011.8	17.8
2003/04	1,459.3	1,183.2	34,424.4	11.2	7.9	28.1	41.4	63.6	2,489.1	19.1
2004/05	1,773.7	1,347.6	38,016.3	11.8	8.7	33.2	42.4	55.4	3,080.2	20.6
2005/06	2,124.8	1,525.4	41,714.9	12.5	9.2	35.9	42.4	64.1	3,687.2	21.7
2006/07	2,739.0	1,834.7	48,649.1	14.1	8.6	35.4	37.9	57.0	4,409.0	22.7
2007/08	3,634.6	2,223.3	57,179.0	15.9	10.1	48.4	38.8	68.1	5,943.0	26.0
2008/09	4,301.9	2,158.8	52,273.3	15.9	9.7	52.0	37.9	61.4	6,928.9	25.6
2009/10 ***	5,096.0	2,430.4	54,667.0	16.4	10.1	55.8	38.0	66.8	8,224.0	26.4

Source: Authors' calculations based on various data and reports (MoFEA, 2007, 2008, 2009a, 2009b; NBS, 2006, 2007; and Bank of Tanzania, 2008).

Note: \* Includes grants (budget support, project grants, MDRI grants) and loans (budget support loans and development project loans) but subtracts foreign debt service amounts; \*\* This is the sum of domestic revenues and net inflows of external resources. MoFEA reports higher figures than those presented here, given that the ministry includes other domestic resources such as borrowing from the Tanzanian banking and nonbanking systems and privatization funds. Moreover, MoFEA figures consider gross inflows of external resources (before foreign debt service); \*\*\* Budgeted amounts. # This figure is particularly high as a result of the cost of the debt service.

*The Tanzanian economy still depends to a large extent on foreign financing despite rising domestic revenues.* The total amount of external resource inflows mobilized by the government has increased from 2.2 percent of GDP to approximately 10 percent of GDP over the last ten years, representing 38.2 percent of total government resources on average since FY 2002/03. The total amount of external resources for FY 2008/09 represented 38 percent of total revenues or about US\$ 52 per capita, a figure slightly higher than the African low-income countries' average (about US\$ 49 in 2006). Grants are the most important component of these net external resource inflows, equivalent to 66 percent on average over the past ten years. Grants also represented between 30 percent and 50 percent of total domestic revenues (averaging 40 percent over the period), raising the issue of the Tanzanian economy's aid-dependency.

## ● Government Expenditure

*Public expenditures after debt service have increased considerably.* In line with the general increase in government revenues, the volume of total government expenditures has increased by more than a factor of four since FY 1998/99 (See Table 1.5 below).

Recurrent expenditures constitute the bulk of total government expenditures, representing approximately 70 percent over the last five years. These recurrent expenditures include the service of public debt, which is not subject to budget trade-offs. It is therefore important to focus on public recurrent expenditures after debt service. In FY2008/09, these represented more than 90 percent of total recurrent expenditures, compared with 85 percent ten years ago. This increase occurred in the context of Tanzania's eligibility to the Heavily Indebted Poor Countries Initiative for debt relief. The decrease in the share of resources spent on debt service over the past ten years has enabled the government to give greater priority to the provision of public services. The next section shows that the education sector has benefited from this increase in public service funding.

**Table 1.5: Trends in Government Expenditure, (FY) 1998/99-2009/10**

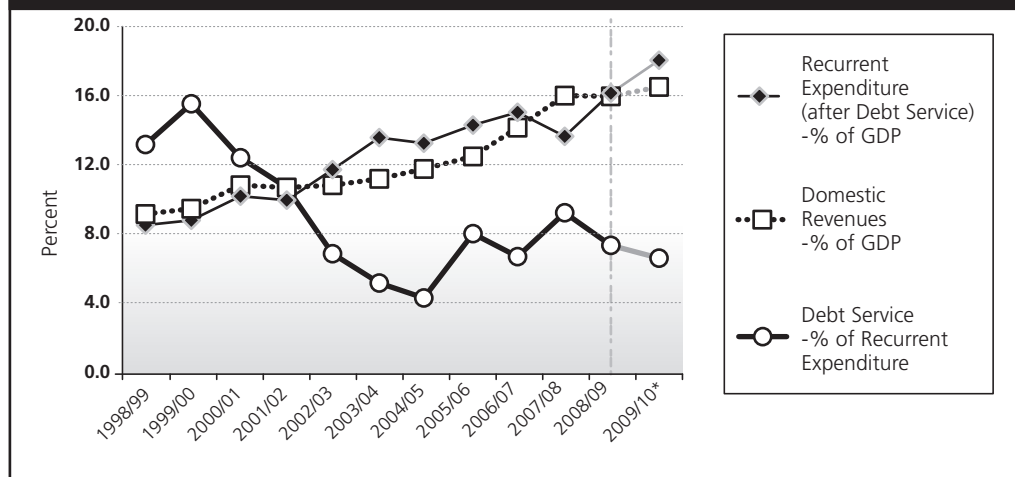
	Recurrent Expenditure				Development Expenditure		Total Expenditure			Global Deficit (% of GDP)	
	% of Total	After Debt Service		Debt Service (%)	% of GDP	% from External Resources	T Sh (billion)		% of GDP	Before Grants	After Grants
		% of GDP	% of Domestic Revenues				Current	Constant 2001			
1998/99	83.3	8.7	94.7	13.3	2.0	86.2	816.7	951.0	12.1	-2.9	-0.4
1999/00	69.2	8.9	94.2	15.8	4.7	94.6	1,168.4	1,243.1	15.2	-5.8	-2.2
2000/01	78.1	10.3	95.8	12.6	3.3	87.7	1,305.1	1,305.1	15.1	-4.4	-1.0
2001/02	76.5	10.2	95.9	10.8	3.5	85.4	1,466.1	1,380.2	15.0	-4.3	-0.4
2002/03	75.1	11.7	108.7	7.0	4.2	79.8	1,896.9	1,656.6	16.8	-6.0	-0.5
2003/04	73.4	13.6	121.5	5.3	5.2	80.4	2,550.3	2,067.8	19.6	-8.4	-3.3
2004/05	66.1	13.3	112.6	4.5	7.2	77.6	3,164.3	2,404.2	21.1	-9.3	-4.5
2005/06	68.5	14.4	115.0	8.2	7.2	75.8	3,883.3	2,787.8	22.9	-10.4	-4.5
2006/07	70.1	15.0	106.7	6.9	6.9	62.4	4,474.7	2,997.3	23.0	-8.9	-4.0
2007/08	65.6	13.7	86.2	9.4	7.9	68.7	5,269.0	3,223.1	23.1	-7.2	2.9
2008/09	65.8	16.3	102.8	7.5	9.2	62.4	7,265.4	3,982.7	26.8	-11.0	-1.2
2009/10 *	68.1	18.1	110.5	6.8	9.1	65.7	9,513.7	4,774.3	28.5	-12.1	-2.1

Sources: As for Table 1.4.

Note: \* Budget data.

However, the government budget deficit has increased. Since FY 2002/03, recurrent expenditures after debt service are higher (by 12 percentage points on average) than total domestic revenues, which raises the issue of the long-term sustainability of these expenditures.

**Figure 1.4: Recurrent Expenditures After Debt Service and Domestic Revenue, (FY) 1998/99-2009/10**  
Percent



Source: Based on Tables 1.4 and 1.5.

Note: This figure also illustrates a strong correlation between domestic revenues (as a percentage of GDP) and recurrent expenditures (after debt service - as a percentage of GDP). The R2 of the correlation is 79.7 percent.

\* Projection.

Development expenditures have followed the general increase in total government expenditure. However, the government continues to rely on foreign resources for investments. In fact, external resources have accounted for an average of 70 percent of the development budget since 1999, again raising the aid-dependency issue. The aid-dependency problem is further reflected by the high global government deficit, even once grants are taken into account. The government deficit, representing between 3.3 percent and 4.5 percent of GDP over the decade, has become an issue since FY 2003/04. Given the resource gaps emanating from competing expenditure demands from different public sectors, there is a need for the government to increase its domestic revenues and contain the growth of unmatched government expenditures, by improving the efficiency of public service delivery in general, and of the education sector in particular, given that it represents an important share of government expenditures, as shown in the next section.

## Total Government Education Expenditure

Total government expenditure for the whole education system (from preprimary to higher education, including folk education, community development colleges, teacher education, adult and nonformal education, vocational training and tertiary institutions under various ministries) has been analyzed, based on various ministries' allocations (commonly called "votes" in Tanzania), detailed in the MoFEA budget books. Estimations also include Teacher Service Commission expenditures and intergovernmental education transfers to regions and

Local Government Authorities (LGAs). Only actual expenditures are considered here, given that they reflect the amounts effectively absorbed by the education system.

Development partners' budget contributions to the education sector (such as for the primary education development program and the secondary education development program) have been merged with government expenditures. In fact, most external financial resources are provided as global budget support and are therefore reflected in the public expenditure figures. Other external contributions (nonbudget resources) are not necessarily included in the computations, mainly because of data collection challenges.

Regarding data availability, it is noted that data for actual recurrent expenditures are available since FY 2000/01, whereas a comprehensive picture of actual development expenditures can be provided only since FY 2003/04. Global computations are presented in Table 1.6.

	Recurrent Expenditure			Development Expenditure		Total Expenditure		Recurrent Expenditure (% of Total)
	Current T Sh (billion)	Constant 2001 T Sh (bn)	Per School-aged Child * (Constant 2001 T Sh)	Current T Sh	Constant 2001 T Sh (bn)	Current T Sh (bn)	Constant 2001 T Sh (bn)	
2000/01	216.4	216.4	29,703.8	—	—	—	—	—
2001/02	264.1	248.6	33,129.5	—	—	—	—	—
2002/03	338.3	295.5	38,216.9	—	—	—	—	—
2003/04	407.6	330.5	41,494.7	155.4	126.0	563.0	456.5	72.4
2004/05	466.0	354.1	43,149.5	178.2	135.4	644.2	489.5	72.3
2005/06	572.2	410.8	48,591.8	53.0	38.1	625.2	448.8	91.5
2006/07	834.6	559.1	64,204.2	107.1	71.8	941.7	630.8	88.6
2007/08	1,004.1	614.2	68,476.2	134.3	82.1	1,138.4	696.3	88.2
2008/09	1,172.9	643.0	69,569.0	152.0	83.3	1,324.9	726.3	88.5
2009/10**	1,455.7	730.5	76,705.2	233.1	117.0	1,688.8	847.5	86.2

Source: Authors' calculations based on various MoFEA budgets, VETA budgets and NBS-corrected population projections.

Note: \* Children aged 7 to 15 years are considered as a proxy of the demographic pressure on the education system. \*\* The figures for FY 2009/10 are based on approved estimates. The figures account for education expenditures channeled through MoEVT, regions, LGAs and various other ministries and agencies, including: VETA, the Treasury (vote 21), Home Affairs (votes 28 and 51), Justice and Constitutional Affairs (vote 40), Agriculture, Food Security and Cooperatives (vote 43), Industry, Trade and Marketing (vote 44), Lands, Housing and Human Settlements' Development (vote 48), Finance and Economic Affairs (vote 50), Health and Social Welfare (vote 52), Community Development, Gender and Children (vote 53), Prime Minister's Office - Regional Administration and Local Government (vote 56), Energy and Minerals (vote 58), Communication, Science and Technology (vote 68), Natural Resources and Tourism (vote 69), President's Office - Civil Service Commission (vote 94), Information, Culture and Sports (vote 96), Infrastructure Development (vote 98) and Livestock and Fisheries Development (vote 99).

*Public education expenditure has increased significantly over the past decade.* The total volume of government education expenditure has increased by 60 percent since FY 2003/04. In constant 2001 prices, the volume of total public education expenditure has risen from T Sh 456.5 billion in FY 2003/04 to T Sh 726.3 billion in FY 2008/09. This upward trend was mainly fuelled by the increase in the volume of recurrent expenditure, given that

development expenditure has not been stable.<sup>9</sup> The last column of Table 1.6 above confirms that recurrent expenditure is a key component of the total education budget, representing 85.1 percent of total education expenditure over the 2004-09 period on average. Over the last decade, the volume of public recurrent education expenditure has increased by a factor of three (from T Sh 216.4 billion in FY 2000/01 to T Sh 643 billion in FY 2008/09 - in constant 2001 T Sh prices) denoting a significant increase in government budget allocations to the recurrent activities of the education sector.

*Education is given high budget priority.* In order to better appreciate the overall increase in public education expenditures and the level of budget priority given to the sector, it is important to compare expenditure trends with the demographic pressure the education system faces on the one hand, and with the macroeconomic context on the other. For the former, the total number of school-aged children (seven to 15 years) is used as a proxy for the demographic pressure on the education system. Estimates show that the volume of recurrent expenditure per school-aged child has increased by a factor of 2.3 between FY 2000/01 and FY 2008/09, indicating that the government has been able to better respond to the increased demand for education services. For the latter, indicators are presented in Table 1.7.

	Share of Public Expenditure Allocated to Education (%)						
	Recurrent Expenditure			Development Expenditure		Total Expenditure	
	% of Government Domestic Revenues	% of Public Recurrent Expenditure after Debt Service	% of GDP	% of Public Development Expenditure	% of GDP	% of Public Government Expenditure	% of GDP
2000/01	23.3	24.3	2.5	—	—	—	—
2001/02	25.3	26.4	2.7	—	—	—	—
2002/03	27.8	25.6	3.0	—	—	—	—
2003/04	27.9	23.0	3.1	22.9	1.19	22.1	4.3
2004/05	26.3	23.3	3.1	16.6	1.19	20.4	4.3
2005/06	26.9	23.4	3.4	4.3	0.31	16.1	3.7
2006/07	30.5	28.6	4.3	8.0	0.55	21.0	4.8
2007/08	27.6	32.0	4.4	7.4	0.59	21.6	5.0
2008/09	27.3	26.5	4.3	6.1	0.56	18.2	4.9
2009/10 *	28.6	25.9	4.7	8.3	0.75	19.1	5.4

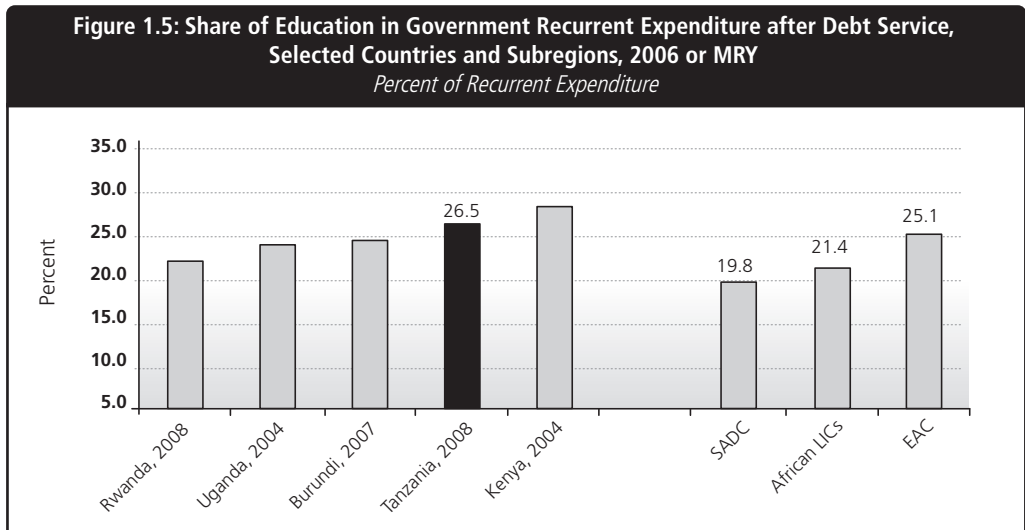
Source: Authors' calculations based on Tables 1.3, 1.4, 1.5 and 1.6.

Note: \* The figures for FY 2009/10 are based on approved estimates.

These indicators confirm that education is a priority sector within the government's budget and agenda. Recurrent education expenditures have consistently represented at least 23 percent of public recurrent expenditure after debt service, reaching 28.6 percent in FY 2006/07 and 26.5 percent in FY 2008/09, without considering the unusual allocation in FY

2007/08 explained by an exceptional increase in the share of public recurrent expenditure allocated to debt service in that particular year, as previously shown in Figure 1.4.

Given the current level of budget priority given to the education sector, Tanzania is among the top 15 African countries allocating at least 25 percent of their public recurrent expenditure after debt service to the education sector. Tanzania also compares favorably with other countries in the subregion (see Figure 1.5). In the East African Community for example, the education sector is allocated an average of 25.1 percent of public recurrent expenditure after debt service, and the average for all African low-income countries is 21.4 percent, compared with 26.5 percent for Tanzania.



Source: Table 1.7 for Tanzania and Pôle de Dakar-UNESCO/BREDA for other countries.

## Prospects for Increased Public Education Expenditure

*The increase in the volume of public recurrent education expenditure is expected to be considerably lower over the next decade than it was over the previous one. Total public recurrent education expenditure has increased significantly, from 2.5 percent of GDP in FY 2000/01 to 4.3 percent of GDP in FY 2008/09, as a double consequence of: (i) the high budget priority given to the education sector; and (ii) the increase in government domestic revenues' share of GDP. The FY 2008/09 figure is higher than the average for all African low-income countries (3.3 percent).*

Some options to further increase the volume of recurrent resources allocated to Tanzania's education sector do however remain. These will depend on progress made in four key areas, for which the following assumptions can be made (See Table 1.8 below):

- (i) The global national economic performance: the Tanzanian economy has performed very well over the last ten years. According to available MoFEA projections, annual GDP growth is expected to average close to seven percent for 2009-14 (See earlier Table 1.3). This report assumes that this growth rate will be maintained (as a worst-case scenario) until 2020;
- (ii) The government's ability to increase domestic revenues' share of GDP: the government projects to increase domestic revenues to at least 18.6 percent of GDP by FY 2011/12. Based on past Tanzanian trends and on the experiences of countries with similar levels of economic development, this report assumes that domestic revenues will reach a minimum level of 20 percent of GDP by 2020;
- (iii) The scope for further improvements in public finance management (macroeconomic discipline) in order to reduce the fiscal deficit: it has previously been noted that public recurrent expenditure after debt service was higher on average than total domestic revenues. For the next ten years, this report assumes that the government will reduce the relative increase of recurrent expenditure to allow for long-term sustainability and reduce development expenditure's aid-dependency; and
- (iv) The level of budget priority given to the education sector: it is expected that the share of public recurrent expenditure after debt service allocated to education will be maintained at current levels (26.5 percent) over the next decade. Competing demands from other sectors (such as health, agriculture, infrastructure and technology) should not be underestimated however, given that they are also key engines of economic growth. For this reason, this report projects the education share of public recurrent expenditure after debt service at a minimum of 22 percent, the current African low-income countries' average.

**Table 1.8: Scenarios of Education's Share of Recurrent Expenditure, FY 2019/20 Projections**

	Baseline: FY 2008/09	FY 2019/20 Scenarios			
		1	2	3	4
<b>Policy Options</b>					
Government Domestic Revenues (% of GDP)	15.9	20.0	20.0	21.0	22.0
Government Recurrent Expenditure after Debt Service (% of Government Domestic Revenues)	102.8	100.0	100.0	90.0	90.0
Education's Share of Public Recurrent Expenditure after Debt Service (%)	26.5	25.0	22.0	22.0	22.0
<b>Impact of Policy Options</b>					
Public Recurrent Education Expenditure (% of GDP)	4.3	5.0	4.4	4.2	4.4
Recurrent Education Expenditure (Billions of constant 2009 T Sh)	1,173	2,026	1,787	1,689	1,769
Real Increase since FY 2009 (%)	n.a.	73	52	44	51

Source: Tables 1.4, 1.5 and 1.7 for FY 2008/09 and Authors' simulations.

Note: Shaded cells indicate changes in parameters, compared with the baseline or the previous scenario. All the assumptions are based on annual GDP growth of 7 percent over 2009-15.

Based on these assumptions, the increase in recurrent education expenditure between FY 2008/09 and FY 2019/20 is expected to be between 44 percent and 73 percent. Although these simulations are based on realistic assumptions (the more optimistic scenarios are not shown here), they show that the volume of resources likely to be allocated to the education sector over the next decade will not double, even in the best-case scenario.



## KEY FINDINGS

This chapter shows that the demand for education will remain high over the next decade, given that global demographic growth is expected to remain high, although rates may decrease. The total population is expected to grow by 32 percent between 2010 and 2020; over the same period, the under 15 years age-group will slightly decrease from 44.4 percent to 44.2 percent of the total. Given the fragile demand for education on behalf of specific groups such as orphans (who represent 8.5 percent of the under 15 years age-group) and children from poor families, education policies will need to focus specifically on these groups.

The Tanzanian economy has shown an impressive and sustained economic performance over the last decade. This trend is likely to strengthen given that average GDP per capita (about US\$ 565 in 2010) remains lower than the African low-income countries' average (US\$ 800). In the context of economic growth, the government has mobilized significant resources directly from national income. In fact government domestic revenues have increased from 9.2 percent of GDP in FY 1998/99 to 15.9 percent of GDP in FY 2008/09. This figure is lower than in comparable low-income countries however (the East African Community average is 16.8 percent and the other African low-income countries' average is 20.3 percent).

The Tanzanian government has also benefited from a sizeable amount of external resources, which have represented almost 40 percent of total public resources since FY 2002/03, raising a critical aid-dependency issue. It is imperative that the government supports the favorable budding trend in domestic revenue collection and develops strategies to reduce its dependency on foreign aid. Containing the growth of unmatched recurrent government expenditures should also be one of the government's key priorities in order to bridge the gap caused by the perennial reliance on donor funding.

The government has maintained a high budget priority for the education sector. The actual share of government recurrent expenditure after debt service allocated to the education sector was about 26.5 percent in FY 2008/09, higher than the East African Community average (25.1 percent), and than the other African low-income countries' average (21.4 percent). The current level of budget priority given to the education sector will be difficult to maintain over the next decade, in a context of competing demands by other key economic sectors such as health, agriculture and infrastructure. The fiscal scope for further increases in education expenditures may be found in the macroeconomic framework (sustained economic growth with higher domestic revenues and a reduced fiscal deficit). Simulations show that future rises in recurrent education expenditures will be much lower than the increases recorded over the previous decade.

This situation calls for greater efficiency gains (or cost-saving strategies) in the use of public resources allocated to the education sector, as discussed in subsequent chapters.

## Notes

- 3 This figure includes 1.3 million for Zanzibar, representing about three percent of the total population.
- 4 The Human Development Index, recognized as providing a broader definition of well-being than GDP per capita, is a composite measure of three dimensions of human development: living a long and healthy life (measured by life expectancy at birth), being educated (measured by adult literacy and composite primary and secondary education gross enrollment ratios) and having a decent standard of living (measured by the purchasing power of parity of national income).
- 5 The country ranks fairly well in terms of literacy and enrollment ratios, but has been less well classified in terms of the level of income per capita (ranking 157th/182) and life expectancy (close to 55 years; ranking 151st/182).
- 6 According to a 2005 study on the impact of HIV/AIDS in the public service, seven percent of the total workforce is HIV positive (370,000 employees).
- 7 Zanzibar is dealt with separately from mainland Tanzania whenever possible, however disaggregated data is not always available. Unless clearly otherwise specified, figures refer to mainland Tanzania only.
- 8 The sectors most affected by the global financial and economic crisis were agriculture, manufacturing, mining and tourism (MoEFA, 2009 - Budget Speech).
- 9 Recent development expenditure is considerably lower than in FY 2003/04 and FY 2004/05.



