



THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION AND VOCATIONAL TRAINING

Education Budget

Tanzania

EDUCATION SECTOR ANALYSIS

Beyond Primary Education, the Quest for Balanced and Efficient Policy Choices for Human Development and Economic Growth



United Nations
Educational, Scientific and
Cultural Organization

Dakar Office
Regional Bureau
for Education in Africa

Dar es Salaam
Cluster Office

Pôle de Dakar

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EXECUTIVE SUMMARY

2011



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The findings, interpretations, and conclusions expressed in this volume do not necessarily reflect the views of the Executive Director of UNESCO or the Government of Tanzania.

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Foreword

This education sector analysis (ESA) for mainland Tanzania is a detailed analytical document that offers a comprehensive picture of mainland Tanzania's education sector. The main purpose of an ESA (also known as Country Status Report, or CSR) is to provide an evidence-based diagnosis of an education sector, to enable decision-makers to orient national policies. It also provides relevant analytical information to nourish the dialogue between the government and education sector stakeholders, including development partners. In the current development context, marked by the necessity for countries to develop sound, sustainable and credible strategies and plans in which education is embedded, ESAs represent a valuable and essential tool.

This is the second ESA for Tanzania; the first one having been conducted in 2001. Although its main objective is to provide a comprehensive picture of the education system in 2009 (the last year for which statistics were available), it also provides some analysis of the evolution of the system over the decade, when feasible and relevant. This second report is also more than an update. It provides more in-depth analysis on certain aspects of the system: detailed unit costs by subsector, external efficiency, quality and out-of-school, and technical education and vocational training and higher education in particular. It provides key monitoring and evaluation inputs on the education sector as a whole, that are particularly valuable in the framework of the implementation of the Education Sector Development Programme.

This 2011 ESA was carried out between February 2009 and November 2010 by a multi-ministerial national team with the support of the Pôle de Dakar (UNESCO/BREDA) and the UNESCO Institute of Statistics. It was part of the activities conducted under the Education Sector Management Information System (ESMIS) Programme,¹ one goal of which is to support the development of capacities in data analysis using data generated by the ESMIS and other sources to strengthen sector-wide planning and policy reforms. The ESA process contributed to the strategy for building capacities in data analysis through a combination of: (i) learning-by-doing, through a series of workshops, and (ii) theoretical training sessions, offered in parallel to the workshops by the Bureau of Educational Research and Evaluation of the University of Dar es Salaam (BERE/UDSM), based on the SAMES² materials provided by the Pôle de Dakar.

The analyses presented in this ESA were made possible by using existing data and information from multiple sources, and more particularly: school administrative surveys conducted by the Ministry of Education and Vocational Training (BEST, TCU and NACTE data); household budget, labor force, demographic and health surveys conducted by the National Bureau of Statistics; and SACMEQ data on learning achievements, including examination data from NECTA. Macroeconomic data and government finance statistics were provided by MoFEA, and specific data were made available from VETA and the HESLB. Obtaining timely (household surveys, SACMEQ, and payroll data) and reliable key data (EMIS data were fraught with flaws) was a major constraint that has heavily limited the scope of some analyses. Nevertheless, some important conclusions have been reached, both on the achievement front, and on the major challenges faced by the education system.

The 2011 ESA has highlighted some interesting achievements, including:

- *Sustained economic growth and greater public resources have translated into a relatively higher education budget.* The government spent 4.3 percent of GDP on education in FY 2008/09 (from a low 2.5 percent in FY 2000/01), much more than countries with similar levels of development. Education has also been given high budget priority. The sector benefited from 26.5 percent of recurrent government expenditure after debt service in FY 2008/09, well above the African low-income countries' average of 21.4 percent;
- *Tanzania is on track to achieve the millennium development goal of universal primary education.* Access is almost universal and the primary completion rate is close to 90 percent. The fee-free primary education policy has had a positive impact by boosting both access and retention. Tanzania's preprimary gross enrollment ratio is close to 37 percent, compared with just 20 percent on average for comparable African countries. Tanzania's administration of this level, using similar teaching approaches as for the primary cycle and similar school premises, has helped to lower unit costs and increase enrollment;

- *Enrollment has increased for all cycles, and particularly in higher education, allowing Tanzania to rapidly catch up with the levels of comparable developing countries: in 2009, the number of higher education students in Tanzania was 36 percent lower than the average, down from 50 percent in 2006. This trend is likely to continue as a direct consequence of the expected development of secondary education;*
- *The Tanzanian higher education and TVET sectors are well positioned to adequately manage the development and diversification of supply. Existing policies and regulatory bodies provide a sufficient, solid and modern institutional framework for the system to build upon for its future development;*
- *Education has a significant impact on social and human development, particularly on literacy, poverty, fertility, and maternal and child health. Primary education is the level that has the greatest impact on social outcomes: it contributes to almost 60 percent of the total impact, which further reinforces the justification for sustained efforts to ensure that all Tanzanian children complete at least the primary cycle; and*
- *Education responds to labor market needs. Greater levels of education lead to higher incomes. The wage premium for workers with secondary education is particularly significant, suggesting that there is a severe shortage of individuals with secondary qualifications. There is also a strong connection between vocational training and graduates' employment. In general, the income of VET graduates compares favorably with that of self-employed individuals with primary education or O-Level secondary.*

The 2011 ESA also points to key challenges in the coming years for the development of the education sector in Tanzania, including:

- *Achieving greater efficiency gains (or implementing cost-saving strategies) in the use of public education resources. Indeed, it is unlikely that the current level of budget priority given to the education sector will be maintained over the next decade, due to competing demands by health, agriculture and infrastructure;*
- *Increasing the public resources allocated to secondary education. Tanzania's secondary cycle receives 35 percent less funding than countries who are equally close to achieving universal primary education. This situation should be carefully reviewed to avoid affecting quality as the sector expands. Secondary schools already display high pupil to teacher ratios (49 to 1);*
- *Ensuring children enter primary school at the right age. Approximately 13 percent of primary school-aged children were still out of school in 2006, 88 percent of which had never attended. Although poverty is a constraint, age appeared to be the main reason for nonattendance. Late primary entry is common (only 36 percent of Standard I students were of official school age – seven years – in 2006) and is known to have a detrimental impact on schooling paths;*

- *Improving access to and retention in secondary cycles.* Although considerable improvements in access to secondary school have been noted, especially at O-Level, they are still limited. In 2009, half of children had access to O-Level and 23 percent were able to reach the last grade of the cycle, up from just eight percent in 2003. A-Level access is still strikingly low, at five percent. Whereas lack of supply is a major hindrance to O-Level and A-Level access, economic difficulties and cultural issues among certain population groups also contribute to fragile school demand. The policy to have a secondary school in each ward has had a very positive impact on secondary access and on primary retention rates;
- *Supporting pro-poor schooling.* Important disparities in access exist according to gender and area of residence, and they increase with successive levels of education, but the most discriminatory factor in schooling patterns is families' level of income. It has also been shown that households' contributions to education are still significant at the primary level (equivalent to a quarter of public resources), despite the fee-free primary education policy. Furthermore, disadvantages tend to be cumulative. Poor rural girls face the worst access and retention conditions;
- *Taking affirmative action to enhance girls' participation in school to ensure gender parity at postprimary levels.* Insistence on girls fulfilling their traditional role in society, early marriage and pregnancy all favor dropout. Trends could be reversed by: (i) awareness raising campaigns to sensitize parents on the value of educating girls beyond primary, and on the negative impact of early marriage and pregnancy on schooling and female health; (ii) greater numbers of female teachers and the provision of community-based hostels to avoid girls the long journeys to and from school, addressing security concerns; and (iii) scholarships and cash transfers targeting bright girls, reducing direct and opportunity costs, mirroring the government's programme targeting the most talented primary graduates from poorer backgrounds;
- *Improving pedagogical management* to raise the quality of basic education. Although the improvement dynamic observed in primary education learning outcomes between 2000 and 2007 is very encouraging, and better than in neighboring countries, learning achievements are still modest by international standards. In addition, national examination pass rates are dropping, and the results of those who graduate are low, especially at primary and O-Level;
- *Reducing disparities between regions, districts and schools,* that persist despite decentralization, highlighting the need for effective planning and monitoring tools to allocate education inputs more efficiently. A decentralized information and monitoring system could help by providing decision makers with timely, accurate and reliable data on the education sector. In addition to an EMIS system, financial and human resource management systems would improve fiscal management and accountability. A first response to this challenge was given in 2009, with the development of a pilot decentralized Basic-Education Management Information System (BE-MIS). Tested in 28 district councils in 14 regions, the BE-MIS is to be scaled up to all councils nationwide by 2014; and

- *Adequate planning of TVET and higher education expansion.* The increase in primary and secondary school enrollments is already placing much strain on secondary, TVET and higher education institutions. An urgent response is required to ensure the smooth and manageable development of these subsectors.

The challenges faced by higher education are of particular importance:

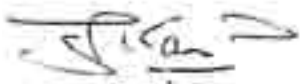
- *It is essential that funding mechanisms be improved.* Higher education is blatantly inefficient, paying little attention to potential economies of scale. In addition, approximately 28 percent of the level's budget is devoted to badly targeted social expenditures, particularly loans transferred directly to students: 48 percent of students benefit from a loan, yet less than 10 percent come from the poorest quintiles, which calls for an improvement in the loan targeting mechanisms; and
- *Students' career objectives and the distribution of graduates by subject area must be adjusted,* to achieve better relevancy of higher education programmes to the labor market and enable Tanzania to keep abreast of rapid technological development and needs. Science subjects in particular attract too few students (only 24 percent of students for the 2007/08 academic year, down from 34 percent in 2003/04). Adequate analytical tools should be implemented, such as labor market tracer surveys.

Technical education and vocational training will also be key to Tanzania's development. Some of the key required actions that this ESA highlights for the subsector include:

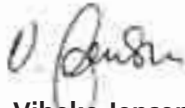
- *Strengthening the subsector's coordination mechanisms.* Although regulatory and quality assurance bodies provide important guarantees for the controlled development of the TVET subsector, it still faces a series of challenges, including: (i) the diversity of training demand linked to the heterogeneity of the target population; (ii) the institutional fragmentation of technical education, under the umbrella of various ministries; (iii) the fragmentation of vocational education and training service delivery, involving two ministries and a parastatal agency; and (iv) the practical continuity between vocational and technical curricula and programmes, although theoretically bridges do exist, as defined by the national qualifications' framework;
- *Revising subsector budget trade-offs.* The Tanzanian TVET system as a whole is not as underfunded as in many other African countries. However, technical nonhigher education absorbs almost 57 percent of all TVET resources, against just 37 percent for vocational training, and six percent for folk education. This funding imbalance should be reduced in order to scale-up vocational education and training activities; and

- *Defining a funding formula to rationalize the allocation of resources among technical institutions.* Surprisingly, it has been noticed that planning and welfare courses are twice as expensive as health and allied science courses. However, even for a given subject area, and among institutions with comparable levels of enrollment, variations in the resources allocated are sizeable. This situation merits an improved funding formula and for more coordination in planning and budgeting among parent ministries.

More broadly, this ESA offers valuable and comprehensive resources to anyone interested in the education sector in Tanzania. It is however a snapshot of the system at a particular time. As the sector makes progress in implementing its sector plan, this report's findings are therefore likely to become outdated, although many features will remain valid. It is the hope of both the Ministry of Education and development partners that this document will be of use to all stakeholders in the education sector.



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1 The Education Sector Management Information System (ESMIS) Programme is implemented by the government of Tanzania with the financial and technical support of development partners (the European Union, UNESCO, UNICEF, and UNFPA), within the overall framework of the Education Sector Development Programme for 2008-17. The UNESCO Institute of Statistics is providing technical assistance through its permanent Dar es Salaam cluster office.

2 The Sectoral Analysis and Management of the Education System (SAMÉS), also known as the PSGSE (Politiques Sectorielles et de Gestion des Systèmes Educatifs) is a masters degree offered by the University Cheikh Anta Diop of Dakar (Senegal) with the support of the Pôle de Dakar, targeting Ministry of Education staff and other actors working in the field of education in Africa. The training is currently available in French. An English course is currently under development with the University of The Gambia. For the purpose of this ESA, all training modules were translated into English and made available to BERE.

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The government team was successively led by Cyprian Miyedu, former Chief of the Monitoring and Evaluation (M&E) Section, Department of Policy and Planning of MoEVT, the late George Maliga, Chief of the M&E Section of MoEVT, and Muhwela Kalinga, Acting Chief, M&E Section, under the overall leadership of Professor H.O. Dihenga, the Permanent Secretary of MoEVT. Related administrative issues were handled by Mr Malili and Ms Levira. For Chapters 1 and 3, the government ESA team consisted of Ms Baitwa (Chapters head, Budget and Finance Division, MoEVT), Ms Elinzu (NBS), Mr Kitali (PMO-RALG), Ms Luena (EMIS, MoEVT), Mr Minja (Administration and Personnel, MoEVT), Mr Mtyama (MoEFA), Ms Omolo (TMC-DPLO/LGA Temeke District Council) and Mr Zullu (Administration and Personnel, MoEVT). Mr Pambe (Chapters head, Primary Education, MoEVT), Ms Kiisheweko (TCU), Ms Levira (Adult Education, MoEVT), Mr Maiga (Adult Education, MoEVT), Mr Mchunguzi (Higher Education, MoEVT), Ms Sigwejo (NACTE), Mr Saro (FDC, MCDGC) and Mr Wilberforce (EMIS, MoEVT) constituted the government team for Chapters 2 and 5. The team for Chapter 6 included Mr Mhagama (Chapter head, VETA Division, MoEVT), Mr Misana (Technical Education, MoEVT), Mr Malili (Higher Education, MoEVT), Mr Mwakapalala (NBS), Mr Ndamgoba (FDC, MCDGC), Mr Petro (EMIS, MoEVT) and Mr Sunday (MIS, MCDGC). The government team for Chapters 4, 7 and 8 was composed of Mr Mwenda (Chapters head, Secondary Education, MoEVT), Mr Gabriel (LGA Bagamoyo, PMO-RALG),

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Abbreviations

ACSEE	Advanced Certificate of Secondary Education Examination
A-Level	Advanced Level
AE/NFE	Adult Education and Nonformal Education
AKU	Aga Khan University
ARU	Ardhi University
BE-MIS	Basic Education - Management Information System
BEST	Basic Education Statistics in Tanzania
CBET	Competence-Based Education and Training
COBET	Complementary Basic Education in Tanzania
CPRS	<i>Contrats Programme de Réussite Scolaire</i> (School Performance Contract)
CSEE	Certificate of Secondary Education Examination
DbyD	Decentralization by Devolution
DEO	District Education Officer
DSE	Department of Secondary Education of MoVET
DUCE	Dar es Salaam University College of Education
EAC	East African Community
EFA	Education For All
ECCD	Early Childhood Care and Development
EMAC	Educational Material Approval Committee of MoEVT
EMIS	Education Management Information System
FBO	Faith-Based Organization
FDC	Folk Development College
FY	Fiscal Year
GDP	Gross Domestic Product
GER	Gross Enrollment Rate
GPI	Gender Parity Index
HBS	Household and Budget Survey
HE	Higher Education
HEDP	Higher Education Development Programme
HESLB	Higher Education Student Loan Board
HKMU	Hubert Kairuki Memorial University
HLI	Higher Learning Institution

IAE	Institute of Adult Education
ICBAE	Integrated Community-Based Adult Education
ICT	Information and Communication Technology
IEC	Internal Efficiency Coefficient
IIEP	International Institute for Educational Planning
IMF	International Monetary Fund
IMTU	International Medical & Technological University
IUCO	Iringa University College
KCK	Postbasic Literacy (ICBAE component)
KCM	Basic Literacy (ICBAE component)
KCMC	Kilimanjaro Christ Medical College
LGA	Local Government Authority
LGRP	Local Government Reform Programme
LIC	Low-Income Country
LOITASA	Language of Instruction in Tanzania and South Africa - A research project
MCDGC	Ministry of Community Development, Gender and Children
MCST	Ministry of Communication, Science and Technology
MDAs	Ministries and Department Agencies
MDRI	Multilateral Debt Relief Initiative
MEM	Ministry of Energy and Minerals
MHA	Ministry of Home Affairs
MHEST	Ministry of Higher Education, Science and Technology
MHSW	Ministry of Health and Social Welfare
MICS	Ministry of Information, Culture and Sports
MID	Ministry of Infrastructure Development
MITM	Ministry of Industry, Trade and Marketing
MJCA	Ministry of Justice and Constitutional Affairs
MLFD	Ministry of Livestock and Fisheries Development
MLHHSP	Ministry of Lands, Housing and Human Settlements Development
MMU	Mount Meru University
MNRT	Ministry of Natural Resources and Tourism
MoEVT	Ministry of Education and Vocational Training
MoFEA	Ministry of Finance and Economic Affairs

MRY	Most Recent Year
MUCCOBS	Moshi University College of Cooperative and Business Studies
MUCE	Mkwawa University College
MUCO	Makumira University College
MUHAS	Muhimbili University of Health & Allied Sciences
MUM	Muslim University of Morogoro
MWUCE	Mwenge University College
MU	Mzumbe University
NABE	National Business Examinations
NACTE	National Council for Technical Education
NBS	National Bureau of Statistics
NECTA	National Examinations Council of Tanzania
NGO	Nongovernmental Organization
NTA	National Technical Awards
ODL	Open Distance Learning
OUT	Open University of Tanzania
O-Level	Ordinary Level
PASEC	Programme on the Analysis of Education Systems (Programme d'Analyse des Systèmes Educatifs de la CONFEMEN – Conférence des Ministres d'Éducation des Pays Ayant le Français en Partage)
PCR	Primary Completion Rate
PEDP	Primary Education Development Plan
PETS	Public Expenditure Tracking Survey
PIRLS	Progress in International Reading Literacy Study
PMO-RALG	Prime Minister's Office - Regional Administration and Local Government
PO-PSM	President's Office - Public Service Management
PSLE	Primary School Leaving Examination
PTR	Pupil-Teacher Ratio
RUCO	Ruaha University College
SACMEQ	The Southern and Eastern Africa Consortium for Monitoring Educational Quality
SADC	Southern African Development Community
SAUT	St. Augustine University of Tanzania
SEDP	Secondary Education Development Plan

SEKUKO	Sebastian Kolowa University College
SJUT	St. John's University of Tanzania
SMC	School Management Committee
SMMUCO	Stefano Moshi Memorial University College
SSA	Sub-Sahara Africa
STHEP	Science, Technology and Higher Education Project
SUA	Sokoine University of Agriculture
SUZA	State University of Zanzibar
TASAF	Tanzania Social Action Fund
TCU	Tanzania Commission for Universities
TDHS	Tanzania Demographic and Health Survey
TDMS	Teacher Development and Management Strategy
TEKU	Teofilo Kisanji University
THMIS	Tanzania HIV/AIDS and Malaria Indicator Survey
TIE	Tanzania Institute of Education
TIMSS	Trend in International Mathematics and Science Study
TSD	Teachers' Service Department
TT	Trade Test
TTC	Teacher Training College
TUDARCO	Tumaini University Dar es Salaam College
TVET	Technical and Vocational Education and Training
UCEZ	University College of Education Zanzibar
UDOM	University of Dodoma
UDSM	University of Dar es Salaam
UoA	University of Arusha
UPE	Universal Primary Education
URT	United Republic of Tanzania
VETA	Vocational Education and Training Authority
VTC	Vocational Training Center
WBUCHS	Weill Bugando University College of Health Sciences
ZU	Zanzibar University