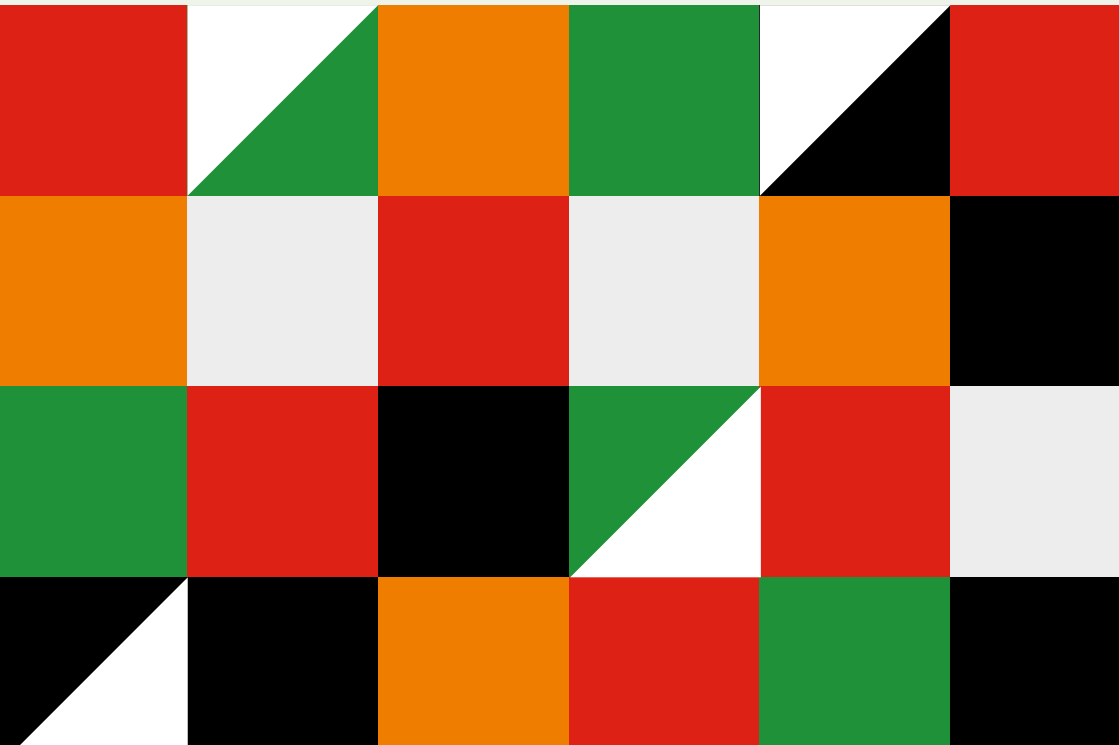
United Nations
Educational, Scientific and
Cultural Organization

Zambia

Education Policy Review: Paving the Way for SDG 4 – Education 2030

September 2016



Zambia

UNESCO
Education Policy Review

September 2016

ED-2016/WS/37

Foreword

Since it achieved independence in 1964, Zambia, in contrast to most of the countries it borders, has experienced a period of political stability. With strong and sustained economic growth over the last decade, Zambia is now classed as a lower middle-income country. The Government's commitment to education has been clear since it passed the 1964 Education Act governing the financing and management of education in Zambia. Education development has been among the Government's main priorities, as indicated by the stable share of government spending devoted to education, as well as successive education sector plans (NIF-I, NIF-II, NIF-III) and associated policy reforms.

Following a period of decline in education delivery and performance, due to growing poverty and underinvestment in education between 1980 and 2001, Zambia has undertaken considerable policy development and reform to meet evolving national aspirations and social demands to improve its national education system. Free basic education (FBE) was, for example, introduced in 2002, through the Basic Educational Sub-sector Investment Programme (BESSIP). Such policy initiatives have resulted in increased access to basic education, improved infrastructure, and enhanced equity at primary level. Zambia is not only close to achieving universal primary education (UPE), but is also approaching universal lower secondary education. The Government's current education strategy is to expand investment to develop upper secondary education, technical education, vocational and entrepreneurship training (TEVET), and higher education. This strategy is not only in line with the Education 2030 Agenda, but also drives to the country's vision 'to become a prosperous middle income country by 2030'.

It is important to note that Zambia's sustained economic growth has not yet been translated into significant poverty reduction. Almost 60 per cent of the population still live below the poverty line. Wide disparities exist between population strata, as well as between urban and rural areas, particularly in education. Despite the improvements made in education, huge challenges remain in terms of education quality, relevance, internal efficiency, and equity, as well as in the effectiveness and efficiency of educational service delivery. For example, notwithstanding the progress made towards UPE, an estimated 195,582 Zambian children were out of school in 2013 (World Bank, 2015). Furthermore, the transition rate to upper secondary education has fallen steeply, from 50 per cent in 2007 to 37 per cent in 2014. The dropout rates are significantly higher for orphans and vulnerable children (OVCs), students from poorer families, and those attending schools in rural areas. Student

performances in national examinations, and national and international large-scale assessments, are well below expectations, as witnessed by the country's Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) results. Performance in Zambian schools remains below the minimum standards established by the Ministry of Education (MoE).

Weak policy implementation, combined with inadequate funding, has undermined the effectiveness and efficiency of education service delivery in Zambia. This was particularly evident in the poor implementation of decentralization policy, inefficient intra-sectoral budget allocation, and the erratic and often late release of the education budget. All these difficulties have been exacerbated by weak education planning and management.

More promisingly, however, Zambia is striving to address these challenges, though its success will depend on how well these efforts are sustained. Under the revised Sixth National Development Plan (SNDP), the National Implementation Framework (NIF) III provides a comprehensive sector development plan with clear targets, aligned with the national Vision 2030 as well as with the fourth Sustainable Development Goal, to ensure inclusive and quality education for all. Given the recommendations of a number of recent appraisals, this one included, it is expected that the Government will make the necessary efforts to ensure an effective and efficient implementation of its sector development plan.

This education policy review is UNESCO's contribution to supporting Zambia in this undertaking. Thanks to the CapED (Capacity Development for Education) programme, UNESCO will be able to sustain its commitment to helping Zambia address some of the recommendations of this policy review, particularly those related to capacity development for the smooth implementation of its sector development plan.

David Atchoarena
Director
Division for Policies
and Lifelong Learning Systems
Education Sector
UNESCO

Table of Contents

List of Tables

List of Figures

List of Abbreviations

AATAZ	Anti-AIDS Teachers Association of Zambia
AIDS	Acquired Immune Deficiency Syndrome
AEP	Alternative education programmes
ALE	Adult literacy education
AWPB	Annual work plans and budgets
BESSIP	Basic Education Sub-Sector Investment Programme
CA	School-based continuous assessment
Camfed	Campaign for Female Education
CapED	Capacity Development for Education
CBA	Classroom-based assessment
CBO	Community-based organization
CBU	Copperbelt University
CPs	Cooperating partners
CPD	Continuing professional development
CSO	Central Statistical Office
DEB	District education board
DECC	District Education Coordinating Committee
DEMC	District Education Management Committee
DFID	Department for International Development of United Kingdom
DHS	Demographic and Health Survey
DODE	Directorate of Distance Education
DOL	Division of Labour
DRC	Democratic Republic of Congo
EBS	Education Broadcasting Services
ECCDE	Early Childhood Care, Development and Education
ECZ	Examinations Council of Zambia
EFA	Education for All
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
EMIS	Education management information system
EPDC	Education Policy Data Centre
ESP	Education Sector Plan
FNDP	Fifth National Development Plan
FTI	Fast Track Initiative
G4CT	Grade 4 Competency Test
G5NA	Grade 5 National Assessment
G9NA	Grade 9 National Assessment
GBS	General budget support

GER	Gross enrolment ratio
GNP	Gross national product
GDP	Gross domestic product
GPE	Global Partnership for Education
GPI	Gender Parity Index
HIV	Human Immuno-deficiency Virus
IBE	International Bureau of Education
ICT	Information and communication technology
IDDC	International Disability and Development Consortium
ILSA	International large-scale assessment
INSET	In-service Education and Training
IOB	Institute of Development Policy and Management of Netherlands
ITN	Insecticide-Treated Bed Net
JASZ	Joint Assistance Strategy for Zambia
LFFTE	Limited Financial Flow Tracking Exercise
LFS	Labour Force Survey
LSEN	Learners with special educational needs
MCDMCH	Ministry of Community Development, Mother and Child Health
MCDSS	Ministry of Community Development and Social Services
MoESP	Ministry of Education Strategic Plan
MDGs	Millennium Development Goals
MECES	Ministry of Education and Culture under the Examinations Section
MESVTEE	Ministry of Education, Science, Vocational Training, and Early Education
M&E	Monitoring and evaluation
MoGE	Ministry of General Education
MoHE	Ministry of Higher Education
MSTVT	Ministry of Science, Technology, and Vocational Training
MTEF	Medium-Term Expenditure Framework
NAC	National AIDS Council
NE	National examinations
NER	Net enrolment ratio
NGO	Non-governmental organization
NatCom	National Commission (for UNESCO)
NIF	National Implementation Framework
NLSA	National large-scale assessment
NSC	National Science Centre
ODL	Open and distance learning
OVC	Orphans and vulnerable children
PBR	Pupil-book ratio
PEO	Provincial education office
PER	Public expenditure review

PPP	Public-private partnership
PECC	Provincial Education Coordinating Committee
PETS	Public Expenditure Tracking Survey
PISA	Programme for International Student Assessment
PITC	Policy and Implementation Technical Committee
PMTCT	Preventing mother-to-child transmission
PRB	Primary Reading Programme
PRBS	Poverty reduction budget support
PRSP	Poverty Reduction Strategy Paper
PS	Permanent secretary
PTR	Pupil-teacher ratio
READ	Russian Education Aid for Development
SACMEQ	Southern and Eastern African Consortium for Monitoring Educational Quality
SADC	Southern Africa Development Community
SBS	Sector budget support
SHN	School health and nutrition
SNDP	Sixth National Development Plan
SNIEU	Special Needs Inclusive Education Unit
SPRINT	School Programme of In-service for the Term
SSA	Sub-Saharan Africa
SWAp	Sector-wide approach
TBS	Target budget support
TDP	Teacher Development Programme
TEVET	Technical Education, Vocational and EntrepeneurshipTraining
TEVETA	Technical Education, Vocational and EntrepeneurshipTraining Authority
TNDP	Third National Development Plan
UCLES	University of Cambridge Local Examination Syndicate
UIS	UNESCO Institute for Statistics
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
UNZA	University of Zambia
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization
ZACODE	Zambian College of Distance Education
ZAMREN	Zambia Education Research Network
ZESSTA	Zambia Education Sector Support and Technical Assistance
Z-EPR	Zambian Education Policy Review
ZLS	Zambia Library Service
ZNBC	Zambia National Broadcasting Corporation

Acknowledgements

This UNESCO report is the result of a collaborative effort involving the Government of Zambia, UNESCO, and a number of independent international experts. Initiated by Francesc Pedró (UNESCO) and Bruno Mesquita (UNESCO), the education policy review of Zambia was led by Hilaire Mputu (UNESCO) who supervised and coordinated the work of the international consultants.

The review team was composed of five experts, four international consultants and one UNESCO staff member, to whom UNESCO would like to express its deep appreciation. The review of system-wide policy and planning was led by Hilaire Mputu (UNESCO staff) who also prepared the first two chapters of this report and compiled the inputs from the four international consultants. The review of teacher policy and development was led by Anil Kanjee (Tshwane University of Technology, South Africa), with the support of Chinapah Vinayagum and Jared Odero (both of Stockholm University, Sweden). The review of TEVET was conducted by Roland Dubois (Consultant, TVET and Youth Employment Programme, Mauritius), with the support of Hilaire Mputu. The review of youth and adult literacy and education (YALE) was conducted by Justin Ellis (consultant, Namibia), with the support of Hilaire Mputu and Inès Boumaiza. The review of monitoring and assessment of learning achievement (MALA) was conducted by Chinapah Vinayagum, with the support of Jared Odero.

UNESCO would also like to thank a number of other contributors for their inputs at different stages of the review's development process. Mathieu Lacasse (consultant) contributed as research assistant to the preparation of the report. Inès Boumaiza (consultant) assisted in summarizing the main findings of the review. A number of UNESCO staff also provided thoughtful feedback to strengthen the parts of the review that focused on their own areas of expertise: Hélène Guiol (TEVET), Florence Ssereo (MALA and teacher), Ulrike Hanemann (YALE), Mari Yasunaga (YALE), and Mariana Kitsiona (MALA). Lina Jiang and Jyoti Rahaman contributed with proof-reading of this document.

This report would not have been realized without the support of each of these contributors. What made the review a rewarding experience for all involved was the dedication of the national team, headed by Cleophas Takaiza, and the valuable support of the Zambia National Commission for UNESCO, as well as other team members from the Ministry of Education, Science, Vocational Training, and Early Education (MESVTEE). The national team made a substantial contribution, not

only by producing the country's self-assessment (background report), but also by facilitating the review process, particularly during the fact-finding mission. In fact, the most enriching part of the whole process was the five-day mission during which Zambian professionals and partners had the opportunity to offer their assessment, and set out their needs and expectations. Their contribution to the identification of policy issues and formulation of recommendations was a great asset in our work. In other words, they have set the agenda for the review and, to their credit, have made it a country-driven undertaking rather than one propelled by UNESCO or by international experts.

We would like to take this opportunity to thank a number of Zambian officials for their hospitality and for facilitating the work of the review team. Our deep gratitude goes to: Chishimba Nkosha (PS, Education), Patrick Nkanza (PS, Science and Technology), Ndakala Charles (SG, Zambia Natcom), Hendrix Kapaipi (Zambia Delegation to UNESCO), Cleophas Takaiza (TEVETA), Owen Ngemezulu (Planning Directorate), Lancelot Mutale (Planning Directorate), David Ndopu (Planning Directorate), Michael Chilala (ECZ), Heather Munachonga (NatCom), Nondo Chilonga (NatCom), Esvah Chizambe (Teacher Education) and Dennis Banda (UNZA), and Gift Masaiti (UNZA).

Last but not the least, UNESCO sincerely thanks all those who consented to be interviewed for the review. They include representatives from development and cooperating partners (AfDB, DFID, Irish Aid, JICA, VVOB, UNICEF, ZESSTA), civil society organizations (CAMFED, People's Action Forum, ZANEC), teacher unions (BETUZ, ZNUT), academia (UNZA), and the private sector.

Executive Summary

1. The education policy review in Zambia

To support the Zambian Government in achieving the goals of the Education 2030 Agenda, this education policy review offers an analysis of the country's education system from a sector-wide perspective, with a focus on Zambia's five national priority domains for education:

- System-wide Policy and Planning (SWPP).
- Teacher policies and development.
- Technical Education, Vocational and Entrepreneurship Training (TEVET).
- Youth and Adult Literacy and Education (YALE).
- Monitoring and Assessment of Learning Achievement (MALA).

With the aim to sustainably achieve equitable and inclusive access, and quality of education, including through enhanced efficiency and effectiveness of education service delivery, key issues and challenges specific to each of priority domains have been identified. Though, a number of problems identified under the area of system-wide policy and planning are cross-cutting and overarching issues, including the performance of the decentralization policy, the level of education financing, the intra-sectoral budget allocation and use, and the sector capacity for planning and management. These are structural issues that affect all other strategic policy domains and that need to be addressed if the educational authorities have to drive Zambia forward in achieving its educational goals and national Vision 2030. Therefore, prioritizing these issues will contribute to addressing all other area-specific issues from a more sector-wide perspective.

2. Key findings

Zambia has achieved remarkable progress in improving access and equity in education, and provides close to universal education at primary level. In 2014, the gross enrolment ratio reached 127 per cent for primary education[1], with a completion rate of 99 per cent. In the same year, 89.4 per cent of children completing primary level education made the transition to lower secondary level, an increase of nearly 36 per cent over 10 years. Zambia has already achieved gender parity at primary

1 Some differences have been noticed between the indicators provided by the Zambia's MoE and those provided by UNESCO. We suspect that these discrepancies are due to the difference between the demographic data used by these two institutions.

level and is rated among the best in sub-Saharan Africa for gender parity at lower and upper secondary. There is no doubt that Zambia's efforts to improve access to education in the past years have, overall, been a success. However, not every initiative has worked. For instance, the implementation of pre-service and in-service training programmes for teachers appears to have had little effect.

Despite the achievements and strengths of Zambia's education system, challenges remain, among them the need to further improve the quality and relevance, equity, effectiveness, and efficiency of the education it provides.

With regard to quality and relevance, Zambia still struggles with high teacher-pupil ratios, which, at 48:1, remain among the highest in sub-Saharan Africa. Furthermore, the limited classroom space and the prevalence of double or triple shifts among teachers that have resulted from increased school attendance have also restricted the number of instructional hours and affected the quality of education. The shortage of qualified teachers and the failure to recruit, train, and retain a sufficient number of academically qualified candidates for teaching positions also undermine education quality.

In terms of equity, Zambia still faces numerous challenges. As noted above, despite near universal primary education, an estimated 195,582 children were not in school in 2013 (World Bank, 2015). Many disparities exist with regard to geographical location, social class, and cultural behaviour, while the plight of orphans and vulnerable children remains a major obstacle to equity in education.

Although enrolment rates have been increasing throughout the country, the overall quality of education raises concerns. This is due, in particular, to the poor quality of teaching, the shortage of qualified teachers, the low standard of education and training, the ineffective use of curricula, and the lack of textbooks, which have led to poor performance in national examinations as well as in large-scale national and international assessments. Zambia has scored below MESVTEE targets in all national examinations and was ranked 13th out of 14 countries in the SACMEQ III (2007) study, in both reading and mathematics. Although the adult literacy rate increased from 69.1 per cent in 2001 to 71.2 per cent in 2010, it remains almost 10 per cent below the Southern Africa Development Community (SADC) sub-regional average. Zambia, therefore, faces significant challenges in enhancing the quality and effectiveness of its education.

While the system has been able to raise educational attainment at primary and lower secondary levels, this success has not given rise to a similar increase in upper-secondary and tertiary level attainment. Nor has it been translated into significant improvements

in literacy levels among children and adults. Despite the policies implemented by the Zambian authorities over the past few years, the system continues to underperform in comparison to countries which invest less in education. This raises questions as to the efficiency of the system and, importantly, its capacity to achieve the goals of the Education 2030 Agenda or to contribute to achieving Zambia's vision of becoming a prosperous middle-income country by 2030.

The effectiveness and efficiency of the education system has been a recurrent theme throughout the review of the five national education priority domains.

3. Domain-specific issues identified

The barriers highlighted in this overall assessment of the educational situation in Zambia – barriers to greater access, higher quality, and inclusive education, as well as to greater effectiveness and efficiency of education – present multiple aspects that need to be addressed. Due to the wide variety of alternatives and possible solutions, the proposals set out in this section are not the only possibilities, but rather a selection reflecting the five priority domains under examination in this policy review.

3.1 System-wide policy and planning

The four major pillars of an education system, access, equity, quality, and efficiency, cannot be effectively achieved without informed and evidence-based governance and policies, effective planning processes, and rigorous implementation strategies and actions. To this end, the Government of Zambia has established a tradition of strategic planning, with the national development plan serving as the cornerstone for sectoral plans, including the education strategic plan (ESP). Zambia's current development agenda, as articulated by its national Vision 2030, focuses on the realization of the revised SNDP and the achievement of the country's goal of becoming a prosperous middle-income country by 2030. The education sector's NIF III (2011–2015) and the ESP for the period 2016 to 2020 provide a framework for its contribution to the national development endeavour, as well as to internationally agreed education goals, in the context of the Education 2030 Agenda.

The review of system-wide policy and planning found that Zambia has in place good policy and institutional provisions with regard to educational planning, governance, and management. The challenges concern the implementation of education policies and programmes, which is often hampered by ineffective accountability mechanisms, poor regulatory frameworks, weak enforcement of laws and regulations, and, to some extent, resourcing issues, such as the shortage of skilled staff. These deficiencies manifest themselves through a number of issues that cut across the five policy domains

analyzed in this review. These include: (i) ineffective implementation of the policy to decentralize education; (ii) late, erratic, and inadequate funding; (iii) inefficient intra-sectoral budget allocation and utilization; and (iv) weak national capacities for effective sector planning and management, including monitoring and evaluation.

The review proposes some policy recommendations to address these key issues.

Policy issues	Recommendations
1. Ineffective implementation of the policy to decentralize education	1.1 Establish a clear and strong regulatory framework, backed by renewed political commitment and adequate funding to support the implementation of decentralization in education. 1.2 Ensure that staff training and profiles match the assignment and expected performance, namely the operationalization of the regulatory framework for effective implementation of decentralization. In addition, MoGE should introduce systematic in-service training for district education board (DEB) staff to update them with new knowledge and skills in order to enhance their capacity to innovate and support them to cope with emerging challenges. 1.3 Promote a management approach that reinforces complementarity in roles and authority between the centre and the sub-level units (DEBs, PTAs, communities, schools) in order to counterbalance the risks associated with abuse of authority within DEBs or excessive control from the centre. 1.4 Develop and disseminate transparent and clear guidelines on grant distribution to DEB officers and school principals, with appropriate training to ensure better understanding and use of the grants. 1.5 Establish a specific monitoring and technical support mechanism to anticipate and address critical issues. A forum for the communication and exchange of experience and best practice can be created to serve this purpose.
2. Weak budget performance: late, erratic, and inadequate funding	2.1 Increase the budgetary allocation to education, in line with the SADC average (around 17 per cent of total government expenditure), and ensure that the Ministry of Finance disburses funds in full and in a timely fashion to MoGE and MoHE in order to effectively implement national education policies. 2.2 Further strengthen the link between planning and budgeting, particularly by enhancing outcome-based budgeting, in order to ensure that education funding is properly targeted and achieves the intended results. 2.3 Develop and/or strengthen mechanisms for permanent monitoring of sector budget performance through the establishment of an effective budget information system, with periodic benchmarks and warnings in order to anticipate problems (e.g. delays in disbursements or execution) and ensure timely interventions. 2.4 Address the concerns of development partners, in light of declining aid to education and the departure of some cooperating partners, by enhancing transparency, efficiency, and accountability in the use of education resources. 2.5 Further strengthen and modernize the financial management information system (FMIS), with skilled staff and appropriate software tools, to provide accurate and timely budgeting and financial information across the government system and to the education ministries, in particular.

Policy issues	Recommendations
3. Inefficient intra-sectoral budget allocation and utilization	3.1 Ensure a harmonized expansion of different education sub-sectors, through a balanced intra-sectoral allocation, taking into account the necessary articulation between the education sub-sectors and the particular roles expected from TEVET and higher education, as key drivers of the social and economic development to sustain Zambia's 2030 vision. 3.2 Ensure that the rebalancing of intra-sectoral budget allocations to pre-primary and post-basic education levels (TEVET and higher education) is accompanied with effective equity and inclusion policies, in order to maximize the impact of the limited public resources for education. 3.3 Address structural inefficiencies in resource management in higher education. 3.4 Increase public expenditure on TEVET to enhance diversified skills training, needed to sustain economic growth and achieve Zambia's ambition to become a prosperous middle-income country by 2030.
4. Weak national capacities for effective strategic planning and management of education development, including plans implementation, monitoring, and evaluation	4.1 Conduct a capacity needs assessment in education planning and management, addressing the main capacity dimensions, i.e. individual, organizational, institutional, and knowledge base capacities. 4.2 Based on the findings from the needs assessment, formulate a comprehensive capacity development strategy for education planning and management, including all relevant levels of education governance (central, province, district, and local). 4.3 Enhance the Planning Directorate's human resource management function. 4.4 Further promote the culture of planning, monitoring and evaluation (M&E), and accountability within the education system. Decision-makers, partners, learners, and users of education services should be sensitized to the critical importance of producing reliable data and effectively implementing the education planning cycle (analysis, strategic planning, implementation, and M&E).

3.2 Teacher policies and development

Numbering more than 93,000, teachers constitute the majority of Zambia's civil servants, and their salaries represent the largest single component of public spending on education. This means that teaching must be a key area of focus in current education reform, especially as Zambia has continuously experienced an acute shortage of qualified teachers due to a combination of factors, including low capacity of teacher training institutions, high attrition rates, and the impact of HIV/AIDS (UNESCO, 2015).

In response to these issues and the imperative to achieve education quality targets, MESVTEE, under NIF III (2011–2015), launched a number of policy actions intended to produce a quantitative and qualitative improvement in teacher supply and management. These included: (i) improving the quality and relevance of teacher education; (ii) increasing the output of pre-service teacher education in order to achieve Millennium Development Goals (MDGs) and EFA goals; (iii) improving

efficiency and effectiveness in college education; and (iv) improving equity in teacher training.

To complement teachers' pre-service training, continuing professional development (CPD) and leadership development programmes were established to enhance the quality of education by providing teachers with opportunities to upgrade their qualifications, support curriculum development, and advance their careers. It is in this context that the Government developed the *Teaching Skills Book*, based on experiences of school-based CPD through lesson study, to help teachers and educators develop learner-centered lessons. The country's commitment to supporting and improving teachers' skills is evident through the various teacher professional development programmes provided by organizations such as public and private teacher training colleges, public and private universities, and non-governmental organizations (NGOs). Teacher resource centres represent another avenue for providing professional development programmes for teachers. These centres have been established at different levels of the system and are operational at the provincial, regional, and district levels.

Despite these efforts, Zambia still faces challenges and issues concerning teachers and teaching. The review team tried to identify and address them, providing recommendations which are listed below and further described in *Section 3.2* of the report.

Policy issues	Recommendations
1. Low teacher training capacity and inadequate teacher qualifications	1.1 Set up an integrated implementation plan with a road map to expand and improve the access to and quality of teacher training programmes in light of the newly revised curriculum for pre-service and in-service provision. Institutions involved in teacher education should be properly consulted on the implementation process. 1.2 Improve the capacity of teacher training institutions to absorb more trainees, focusing on both facilities and the knowledge and skills of lecturers and trainers. 1.3 Implement targeted recruitment strategies to enrol higher numbers of students into mathematics, science, and technology teacher education programmes. 1.4 Provide greater training opportunities for teachers from community schools, including specialized programmes that account for the unique needs of these teachers.

Policy issues	Recommendations
2. Inadequate continuous professional development (CPD) programmes	2.1 Institutionalize a system to improve coordination and harmonization among providers and evaluators of teacher training programmes in order to improve teaching and learning processes, and students' learning outcomes. 2.2 Prioritize the improvement of teacher resource centres at the different levels of the system to support effective teacher development programmes, and restructure continuing professional development programme to reflect the reality of classroom conditions. 2.3 Further develop capacities at national and sub-national levels for monitoring and evaluation of teaching and learning processes, through improved teaching practice opportunities in pre-service programmes and in-service CPD. 2.4 Strengthen monitoring and evaluation of CPD programmes to better understand its impact on teachers' performance and behaviour, as well as on the quality of education.
3. Inadequate policies for teacher remuneration and career opportunities	3.1 Revisit existing salary scales and incentive structures to encourage and facilitate improvements in the status and conditions of teachers and teacher educators and to re-invigorate the teaching profession. Specifically, practices, which lead to primary school teachers being considered inferior to secondary school teachers should be discouraged by ensuring that teachers are remunerated according to their qualifications and experience. 3.2 Develop specific career pathways for the teaching profession at the different levels of the education sector through appropriate training, deployment, and remuneration schemes to ensure that the most qualified teachers continue to address the challenge of improving learning for all children. Specifically, teachers should be encouraged to obtain the highest qualifications possible, including diplomas and degrees (post-graduate or masters), including in primary education, and be rewarded accordingly. Primary teachers should not have to enter secondary schools to improve their salaries.
4. Weak utilization of information and communication technology for implementing continuous professional development programmes	4.1 Equip schools and teacher training centres with modern ICT tools to support teaching and learning, as well as teacher CPD, and provide technology-skilled personnel to support schools in enhancing their use of ICT. 4.2 Make available effective programmes, and increase access to ICT tools, to improve teachers' and instructors' use of basic ICT and pedagogical skills for improving learning and teaching, and develop teacher CPD. Specifically, support networks are required so that teachers can benefit from face-to-face and virtual discussion platforms, and share experiences and learning materials. 4.3 Encourage the combination of online and offline teaching and learning resources among teachers and students. When there is no internet connection, it is still possible to access offline applications. Including non-digital resources is equally important for interaction. 4.4 Promote consultations among users in order to agree on the best ICT solution. Some low-cost ICT solutions are as effective as some more expensive platforms. 4.5 Increase access to ICT tools by improving infrastructure in rural teacher training institutions. This enhances the capacity of users since it increases access points.

Policy issues	Recommendations
5. Lack of facilities and resources and weak capacity and qualifications of staff at teacher education institutions	5.1 Greater investment is required to improve facilities and provide relevant resources for all teacher training institutions to support INSET. To this end, the national education budget should include line items for INSET programmes. 5.2 Effective capacity development programmes should be put in place to enhance the capacity and skills of current academic and support staff. An academic staff development unit should be created, either centrally or locally in all training colleges. 5.3 Strengthen existing capacity by employing competent staff to manage and coordinate INSET activities. 5.4 Monitoring and evaluation of CPD is necessary to understand capacity limitations and to develop mechanisms for sustainability. 5.5 Establish regulatory frameworks at decentralized levels with authority, management, and funding to support quality training for staff at teacher training institutions.
6. Low status, morale, and professionalism of teachers	6.1 Prioritize the effective functioning of the Teaching Council of Zambia (TCZ) by ensuring the availability of funds as well as staff. Specifically, efforts should focus on sensitizing teachers to the roles and responsibilities of the TCZ and encouraging them to begin the process of registration. 6.2 Ensure that an integrated policy framework for providing continuing professional development programmes is aligned with the systems and policies of the TCZ. Specifically, this framework should be aligned to a revised salary structure that rewards teachers' efforts towards CPD.

3.3 TEVET

Zambia recognizes the need to promote TEVET as a means of providing young people and adults with the practical knowledge and skills necessary for economic and income growth, poverty reduction, employment, productivity, and human development. Public TEVET programmes are managed by a range of ministries, while non-formal TEVET programmes are run by private-sector and community-based providers. The principal challenge is to improve access to high-quality, relevant programmes taught by qualified teachers. In order to improve TEVET in Zambia, the review team identified a series of pressing issues that must be addressed, including: (i) limited access to TEVET programmes; (ii) unpreparedness of young people for the world of work; (iii) a lack of financial support and funding; (iv) the need to improve quality and responsiveness to labour market needs; (v) the need for a curriculum better-aligned with labour market requirements; (vi) a lack of quality trainers; and (vii) a lack of quality training programmes. The review team set out a series of recommendations to address these issues, summarized below and expanded upon in *Section 3.3* of this report.

Policy issues	Recommendations
1. Limited and inequitable access to TEVET	1.1 Expand the delivery facilities of TEVET by: (i) promoting collaboration with employers in the delivery of TEVET by devising adequate incentives; (ii) constructing new TEVET institutions, the rehabilitation of existing ones, and the maintenance of appropriate infrastructure. 1.2 Re-brand TEVET so that it is viewed more positively and provide pathways to further training. To achieve this: (i) Students should be well-informed of the opportunities that TEVET can offer and view TEVET as an attractive pathway. Students should also have access to a variety of innovative, industry-led programmes that prepare them for the workplace. In addition, the qualifications framework should be made fully operational and appropriate counselling services should be introduced to provide young people with relevant information on existing training and their future career; (ii) Centres of excellence should be established for different trades/fields within urban areas. These centres can offer a higher level of training for those who are interested in pursuing higher level training or upgrading their skills. 1.3 Expand TEVET training opportunities to ensure inclusiveness and equity by: (i) promoting trade tests and recognition of prior learning for young people already at work; (ii) identifying a number of training centres in rural areas to become leading training centres and providing them with fully equipped mobile training units so that they can move from place to place, also interchanging equipment depending on the needs of these areas; (iii) providing incentives to attract potential students from the most vulnerable groups as they are less likely to enrol in education and are more likely to drop out of school; (iv) revitalising traditional apprenticeship training as it is a means to improve the skills of large numbers of young people in rural sectors of the economy; (v) ensuring safety in TVET institutions and other learning settings for all students and teachers, particularly females, who are the most vulnerable group. These institutions must cater to the specific needs of the learners, particularly the needs of girls and people with physical disabilities.
2. The reservation about the roll-out of the two-tier system being introduced by the Zambian authorities	2.1 It is recommended that the pilot be carefully studied and analysed, taking into account labour-market demand and the resources available at every stage, before any clear decision is taken as to whether the two-tier system should be extended to other schools. 2.2 Provide proper and early counseling services and career guidance for students in order to help them make informed decisions, particularly during their transition from lower to upper secondary school, so that they can choose an appropriate stream according to their abilities and desires. 2.3 Promote/develop effective cooperation between general education schools and TEVET institutions by ways of sharing teachers, programmes and facilities, as well as the institutional arrangements for awarding relevant certificates to those students who successfully complete vocationalised programmes.

Policy issues	Recommendations
3. Inadequate public funding for TEVET	3.1 Improve funding to TEVET institutions in order for them to produce adequate number of quality skilled workers needed to achieve the country's social and economic development vision. Budget allocated must be commensurate with the number of TEVET graduates that need to be produced. In light of the international trends and the SADC average public expenditure to TVET, Zambia should increase its funding of TEVET to at least between 3 per cent and 4 per cent of its education budget. 3.2 Develop and implement a mechanism for sustainable financing of TEVET. In this context, further policy discussion and, if necessary, international technical assistance would be required to revisit the current funding system (institutional grants and TEVET Fund) to make it more transparent and inclusive. A competitive funding system can be introduced to direct the development of public and private TVET institutions in response to demand from enterprises and individuals. 3.3 Consider the introduction of a more realistic costing structure where the students pay a smaller proportion of actual training costs in public institutions. As realistic fees could exclude those who are unable to pay, Government should introduce targeted programmes, such as scholarships, reduced subsidized fees, or soft loans for learners who can not afford to pay the fees. Training voucher schemes might be considered for students from vulnerable groups, including, specifically, those from rural areas. 3.4 Explore the possibility of introducing a training levy grant scheme on a sectoral basis, as a means of building up a pool of funds to support TEVET provision. Prior consultation with employers should take place to decide on a pilot sectoral scheme. These employers could either directly sponsor the training of their employees or contribute to a training levy based on a percentage of their enterprise payrolls. In return, they can be refunded part of the training costs incurred. 3.5 Provide incentives and strengthen partnerships with non-public stakeholders and industry to leverage more funding from the private sector, bring on board more private investors, and seek external grants and other contribution, such as equipment and new technologies.
4. Weak TEVET responsiveness to labour market	4.1 TEVETA should develop a closer and mutually beneficial collaboration between TEVET providers and industry, with effective participation of industry representatives in all stages of TEVET planning, including in curriculum design, delivery, and assessment. 4.2 Government should provide incentives to further encourage workplace experience learning for TEVET students in order to ensure an effective transfer of relevant skills. 4.3 TEVETA should set up effective mechanisms to ensure that TEVET is aligned with the needs of employers and learners by carrying out employment trend survey, training need analysis, and tracer studies. 4.4 TEVETA should enhance the quality and the sustainability of the TEVET management information system (TEVET-MIS), and develop/reinforce its linkages with Zambia Statistics Office and the labour market data systems. This implies adequate funding, skilled staff and enabling working conditions, in terms of technological equipment and facilities, staff salaries and development.

Policy issues	Recommendations
5. Curriculum not relevant to labour market	5.1 Ensure that TEVETA policy of regular curriculum review is effectively implemented. This will contribute to addressing emerging problems of graduates entering the labour market without required skills. In this context, more resources should be placed at the disposal of TEVETA. 5.2 TEVETA should ensure that design and delivery of curriculum are informed by industry's needs and trends. Industry, TEVET providers, and TEVETA should collaborate throughout the different processes of curriculum design, implementation and review. 5.3 TEVETA should ensure that entrepreneurship is effectively integrated in TEVET curricula and that trainers are trained in use of entrepreneurial pedagogies. 5.4 TEVETA should ensure that TEVET curricula are also informed by international trends, in addition to employers' requirements in order to integrate updated and modern training skills on sustainable development, on business support, and social and life skills.
6. Lack of quality trainers	6.1 The Ministry of Higher Education should strengthen the systems, of initial training, and review the Initial Training of Trainers Programme to better prepare and equip trainers to handle new emerging situations. 6.2 Government should strengthen the systems for continuous professional development, management, and support of TEVET trainers. 6.3 Government should restore public trainers to its payroll and pay them a decent salary in order to raise their status and morale, and support efforts to recruit and retain the best trainers. 6.4 TEVETA should review and enhance the standards of accreditation for trainers, assessors, moderators, and examiners.
7. Low quality of training	7.1 Government should reinforce TEVETA to prioritise and direct financial resources for the revitalization of the TEVET institutions through adequate investments in the state of the art technical equipment, modern workshops, computer labs and ICT infrastructure, in all the TEVETA colleges. 7.2 Government should support TEVETA in enhancing its quality control mechanisms to ensure that all public and private institutions meet quality standards. 7.3 TEVETA should strengthen the TEVET Management Information System (TEVET-MIS) to ensure that data on system efficiency and quality are collected, analyzed and used for TEVET policy and planning. 7.4 TEVETA should ensure that the grading of training centres is regularly updated and made available to all relevant stakeholders and the large public. 7.5 Government should support TEVETA to carry out regular and comprehensive tracer studies and publish the findings.

3.4 Youth and Adult literacy and education

In recent decades, Zambia has demonstrated its commitment to improving youth and adult literacy education by implementing education programmes that address the needs of these groups. Unfortunately, these programmes do not go far enough and fail either to address demand or to provide the assistance serious shortages of funding have made necessary. Youth and adult literacy and education (YALE) programmes are essential for those 7.2 million Zambian young people and adults, aged 15 years

or more, who cannot go back to school, but who lack educational qualifications at primary or secondary level. This represents a serious constraint on the achievement of Zambia's Vision 2030. The review team noted a number of challenges that must be overcome in order to address the learning needs of these youth and adults. These concern: (i) the need for a lifelong learning policy for YALE and appropriate policy provision; (ii) limited access to YALE programmes; (iii) the need for improved structures and capacity for YALE; and (iv) the need to focus on quality, results, efficiency, and reputation. Various issues related to these challenges are discussed in *Section 3.4* of this report, where the recommendations too are presented. The following table summarizes the issues and the associated recommendations.

Policy issues	Recommendations
1. Lack of a comprehensive national YALE policy and weak reflection of lifelong learning perspective in YALE programmes	1.1 The education policy currently being written by MoGE (and the related revised education bill) should contain enabling provisions concerning YALE at both primary and secondary level. 1.2 MoGE should frame its new education policy within a lifelong learning paradigm in line with the requirements of the Sustainable Development Goals. 1.3 Government, through MoGE, should support the finalization of the Youth and Adult Literacy Policy drafted in 2009, in collaboration with key stakeholders, including CSOs and FBOs. This policy should address the problems related to regulation, coordination, standardisation and funding, as well as issues regarding data, monitoring and evaluation of YALE in Zambia. 1.4 Provision should also be made for the creation of a national council on YALE, to be appointed by the minister, with the main function of bringing together all actors in YALE in a think tank, and for this council to produce an annual report on YALE activities (not just on its own activities).
2. Limited and inequitable access to YALE	2.1 MoGE should convene a meeting (or meetings) with leading figures in the private sector, and leaders of other large corporations, encouraging them to mount YALE programmes for their staff members. 2.2 DODE should enter into discussions with NGOs and FBOs engaged in YALE with a view to enabling them to expand their YALE programmes. The basis for discussion might be that the government would pay a certain amount for each learner who is able to achieve a certain level of education, subject to testing at the end of the course. 2.3 DODE should conduct or commission a gender survey concerning YALE to better understand how gender relations affect participation in YALE programmes, and the interests of men and women that would motivate them to participate in YALE in greater numbers. 2.4 DODE should devise a plan for expanded access to YALE, considering all recommendations made in this policy review concerning YALE. Due weight should be given to rural areas and to provinces with the lowest literacy rates. 2.5 MoGE should approach Cabinet with a submission on YALE, advocating the various changes that are needed. Part of the submission should be a plan to increase access to YALE. It should also be proposed that funding for YALE should increase in phases to reach 3 per cent of the education budget. 2.6 Government should ensure that participants in government YALE programmes equivalent to primary-level education should not be charged user fees.

Policy issues	Recommendations
3. Inadequate funding, structures and capacity for YALE	3.1 MoGE should be capacitated, with adequate human and financial resources, to ensure policy development and implementation, drafting of laws, regulation, development and enforcement of standards, collection and analysis of data on programmes, negotiation of agreements with other bodies, quality control, coordination of various providers, planning, budgeting, and financial control, grant-making, monitoring and evaluation, and the supervision or carrying out of research. Structures at sub-national levels also need strengthening to ensure effective programme implementation and monitoring. 3.2 MoGE should undertake the profiling of the staff in place for YALE and the restructuring of DODE (and perhaps also MCDMCH, since they do most literacy work) to ensure that there is sufficient management and professional posts for YALE to carry out what is expected of it, considering the large number of youths and adults in need of learning. 3.3 Once new structures are put in place, a training plan should be developed and implemented to ensure that staff members have the skills that are required of them. 3.4 The Zambian Government should request assistance from the Commonwealth of Learning in re-structuring ZACODE as a semi-autonomous college of open learning with a clear mandate and funding arrangements. 3.5 The University of Zambia, in collaboration with the MoGE, should conduct a tracer study of graduates in adult education from the university over, say, the past ten years. A forum for consultation between the university and the ministry should be established and both parties should seek to identify research projects that can be carried out in the field of YALE. 3.6 Infrastructures for YALE should be rehabilitated, expanded and constructed. A particular attention should be paid to ensure that all infrastructures respond to the needs of Learners with Special Education Needs so as to enhance access to literacy programmes for vulnerable groups.

Policy issues	Recommendations
4. Issues related to quality, results, efficiency, and reputation	4.1 MoGE should be empowered, within the usual public-service constraints, to employ full-time and part-time staff, to develop curricula and study materials, to monitor and evaluate programmes, and to transfer funds (based on agreements) to other ministries, NGOs, the private sector, and universities and research institutes so that such bodies can carry out agreed YALE programmes, engage in public advocacy of YALE, carry out research concerning YALE, provide technical support for partner organizations, and charge fees or exempt categories of learners from paying such. 4.2 Government should conduct an evaluation of all literacy work and YALE centres under government auspices (for all the ministries involved). Private programmes could be included if the owners agree. 4.3 Government should make it possible for participants in YALE programmes to be assessed and awarded certificates. Such certificates should be registered on the national qualifications framework. At secondary level, national examinations can still be used, for the time being. 4.4 MoGE should establish a robust database on all YALE programmes in the country and, through EMIS, integrate the main data gathered in the annual statistical bulletin of the ministry. The proposed national council on YALE should also play a role here. 4.5 MoGE should formulate national standards for YALE professional educators through a participatory process and, in due course, obtain acceptance of these standards by the qualifications authority. Make YALE part of the professionalisation of the teaching profession. 4.6 MoGE should cultivate links, contacts, and exchanges with international and foreign organisations with a specialisation in YALE. 4.7 MoGE should employ as many graduates in YALE as possible to lead YALE programmes and gradually replace volunteers with staff members who are paid on the same salary scales as those used in the teaching profession. Those who work part-time or on short-term contracts should be paid pro-rata. 4.8 MoGE should give awards and recognize in every way possible those who do excellent work.

3.5 Monitoring and assessment of learning achievement (MALA)

In Zambia, the capacity for assessment is well developed. The country has a long-running, secure examinations and assessment programme managed by the Examination Council of Zambia (ECZ). Zambia is known for its regular and continuous efforts to assess, examine, and monitor students' learning achievements over the past several decades. The ECZ has experience of both national and international large-scale assessments. Over the years, Zambia has undertaken many reforms and made adjustments in order to improve its national education system. With regard to this priority domain, there is an urgent need in Zambia for coordination and harmonization of all MALA structures, programmes, projects, and activities under a common MALA umbrella. The review team identified a number of pressing concerns that need to be addressed in order to achieve this and improve MALA in Zambia. These include: (i) the need for a built-in comprehensive and complementary MALA system of both a summative and a formative nature; (ii) the problematic use,

analysis, and dissemination of MALA data and results for informed policy-making and implementation; (ii) the requirement of continuous professional development programmes for teachers in MALA; and (iv) the establishment of a generic M&E system to systematically monitor and produce feedback from all assessment systems for teachers, learners, examiners, curriculum and textbook developers, and school leaders. To this end, the review team has identified key issues and presented a series of recommendations, summarized below and amplified in *Section 3.5* of this report.

Policy Issues	Recommendations
1. Absence of a formative orientation of the current MALA system	1.1 Establish a comprehensive MALA framework and built-in system to complement the current summative assessment model with a formative one. 1.2 Promote formative assessment at school level by offering in-service training to teachers and school leaders, as well as toolkits with a wide variety of examples. 1.3 Improve the capacity of individuals tasked with administering examinations, developing tests, and analysing examination results to understand the value of formative assessments by offering them regular and sustainable capacity-building programmes.
2. Lack of use of MALA data to inform policy-making	2.1 The main stakeholders concerned with educational planning, teacher training, curriculum development, and quality control should work in tandem with ECZ and other national and international bodies involved in carrying out MALA surveys in Zambia, to make effective and optimal use of MALA results to improve the quality of learning. 2.2 Monitor the impact of national large-scale assessment (NLSA) results on policy-making and implementation and provide funding for independent studies involving researchers from higher education institutions, so that these results can be optimally used locally and disseminated nationally and internationally. 2.3 A formal national policy document should be written to systematize the effective use of ILSA results in the education policymaking and policy implementation processes. Steady government funding should be made available for ILSA activities, research, and development. 2.4 Coordinate and harmonize the use, analysis, and dissemination of assessment and survey results to design appropriate policies and actions that are directly concerned with effective learning, teacher training, classroom instruction, and general assessment. 2.5 Use MALA results effectively to create alternative career pathways to increase equality of participation and to improve the results of disadvantaged students, and girls in rural areas, in particular. 2.6 MALA results should be provided in an accessible manner to reach major educational stakeholders: the learners, the teachers, the parents, and the front-line implementation agents. Media coverage of the results is indispensable for such a need and purpose. 2.7 Key stakeholders should contemplate the implications of national assessment verdicts. Multiple stakeholders, such as civil society, teachers' unions, teachers, and mass media, need to receive the assessment results and national public awareness campaigns should be launched before international survey results are reported from a worldwide league of nations' perspective. The results of international assessments should be broadcast first and foremost in national media and be disseminated to national and local key stakeholders and teachers before they reach the international media and international educational community.

Policy Issues	Recommendations
3. Inadequate orientation of the current provision of Continuous professional development CPD) programmes for teachers in MALA	3.1 Institutionalize CPD programmes for teachers to effectively implement MALA at national, regional, district, and school levels, following the establishment of a legal framework for its application. 3.2 Increase internal capacity (through further training of human resources) at the MoE with a view to bolstering classroom and school-based assessment. Teachers need training too in all MALA programmes, projects, and activities. Increase monitoring by school officials at district level. 3.3 Increase the possibilities for teachers, especially those in the rural areas, to actively participate in the improvement of MALA through different capacity-building programmes. This is to strengthen and sustain their knowledge, skills and competencies in this field and to ensure effective implementation at school and classroom levels on a continuous basis. 3.4 Promote CPD through workshops, seminars, educational fora, and university-based certificates, diplomas, and degrees in assessment. ICT and other media outlets should be used to disseminate CPD activities. This can widen access to knowledge-sharing. Strengthen in particular locally driven CPD activities for teachers and mobilize more funds for allocation to CPD activities at schools and resource centres. 3.5 Develop and sustain capacity-building programmes for head teachers in CPD activities to improve their knowledge of MALA programmes, projects, and activities. School leadership should be involved in CPD activities to promote teacher practice in knowledge and skills acquisition so as to improve student performance.
4. Lack of a comprehensive M&E system.	4.1 Strengthen the country-specific monitoring and evaluation (M&E) system for MALA in close cooperation with all major stakeholders at ministry, departmental, regional, district, and school levels. 4.2 Explore and analyse good and cost-effective M&E practices for MALA, regionally and internationally, with a view to institutionalizing and strengthening the Zambian MALA system with relevant M&E performance indicators as related to inputs, processes, outputs, outcomes, and impacts. 4.3 Further develop and strengthen the MALA M&E system with democratic structures and institutions, participatory governance, and the empowerment of civil society organizations, local educational managers, planners, and administrators to ensure broad-based commitment to quality education.

4. Conclusion

While this report is based on extensive research and a number of interviews undertaken, in the course of the field mission, by international consultants and UNESCO experts, the review, by no means, offers an exhaustive analysis intended to explore and expose all of the underlying issues at play. Indeed, it should be acknowledged that a number of limitations were identified by the review teams, including the limited timeframe, restricted representation of stakeholders, and a lack of current data. While the report provides an overview of the underlying issues and makes a number of recommendations to the Zambian Government, it leaves room for much greater analysis and cooperation in implementing the recommendations.

As the report indicates, Zambia is committed to improving its national education system. It has made remarkable progress in improving access and equity, of which the Zambian Government and, indeed, the people of Zambia should be proud. No system can be perfect, however, and despite these achievements and strengths, it should also be acknowledged that challenges remain. In particular, the country must not only continue to improve access and equity, but also further enhance the quality and relevance, effectiveness and efficiency of its education system.

Obviously, much remains to be done, but there are already encouraging signs of progress within institutions. Given the commitment of the Government to improving education and the achievements it has already made, it is more than likely that Zambia will continue its work in order to address the many challenges ahead. Although there remains much to do in terms of implementation, Zambia has already taken concrete steps in addressing the Education 2030 agenda.

Introduction

1. Background

The Government of the Republic of Zambia, through its ministries in charge of education (MoGE and MoHE), has joined forces with UNESCO to evaluate the aims, strategies, and achievements of the Zambian education system in relation to its national, regional, and international contexts. This education policy review is intended as a pilot within the framework of the CapED programme, which aims to help education authorities in member states to strengthen their national capacities in order to achieve their educational objectives and targets. Given CapED's strong focus on national capacity development, such an activity represents an opportunity to support Zambia's efforts to improve its policies across a range of national priority domains, in line with its education plans and wider national development framework.

Following consultation with the Zambian education authorities, UNESCO was invited to review five national priority domains and to provide policy recommendations to help strengthen education development in Zambia, within the framework of the Education 2030 agenda.

The priority domains are:

- System-wide policy and planning (SWPP).
- Teacher policies and development.
- Technical Education, Vocational and Entrepreneurship Training (TEVET).
- Youth and adult literacy and education (YALE).
- Monitoring and assessment of learning achievement (MALA).

At the request of Zambia's education authorities, the review was conducted from a sector-wide perspective, including overarching aspects related to the planning and management of the education sector. The findings from the review were drawn from three different sources:

- A national background report, produced by the national team, including senior officials from the education ministries, depicting the context and performance of the education sector, especially in the priority areas.

- A detailed literature review, compiled by UNESCO, based on recent work identified through desk research, and drawing on available documentation and data as well as international perspectives on education policy in Zambia gathered from the government, UNESCO, and other international organizations and donors, as well as academia.

- Two field missions: (i) a scoping mission by UNESCO, which included consultation with Zambian educational authorities to identify the priority domains to be reviewed; and (ii) a fact-finding mission, undertaken by a UNESCO expert with four international consultants, to collect primary data and information through meetings and interviews with the main educational stakeholders, including: government officials, development partners, the private sector, as well as NGO and civil society organization representatives. Data were also collected through visits to educational institutions (the University of Zambia and the Examinations Council of Zambia) and some schools.

2. Structure of the report

This report is composed of three chapters, the first two of which provide the background and context for the review of the five national priority domains selected by the Zambian authorities.

The first part of **Chapter 1** sets the scene by describing some of the characteristics of Zambia, focusing particularly on those most relevant to the review. The second part presents an overview of the Zambian education system.

Chapter 2 provides an analysis of education system performance, especially in terms of access, quality and relevance, equity, and the efficiency and effectiveness of the school system.

Chapter 3 presents an in-depth assessment of the five national priority domains, namely: (i) *system-wide policy and planning*; (ii) *teacher policies and development*; (iii) *TEVET*; (iv) *adult literacy and education*; and (v) *student assessment and monitoring of learning achievement*. For each area, the main policy issues are explored, alongside their corresponding supporting evidence and a discussion of their relevance. Each part concludes with policy recommendations for the relevant departments.

3. Review method

While the country background report (a self-assessment by the national team) and the literature review (by UNESCO) served as background documents for the review, the international experts were instructed to follow UNESCO's approach in identifying and analyzing issues at stake in the different policy domains and elaborating preliminary recommendations. With the support of ministries' officials and other stakeholders, the review adopts an external perspective to identify achievements, relative strengths, weaknesses, and challenges in the Zambian education system. The methodology is based on an empirical research approach using a variety of sources, both quantitative and qualitative, and adopting an international comparative perspective by assessing Zambia's educational performance against that of countries with similar geographical, cultural, social, and economic contexts. This has involved analysis of policy documents, national background papers, media reports, and international comparative research, etc. The outcomes of this research have been enhanced and verified primarily through interview and consultation with ministries' officials, cooperating partners, teachers' unions, the private sector, and NGO and civil society organization representatives.

Building on prior research, field data elicited from each of these stakeholders provided the foundation for identification of the main issues in each priority domain, without the imposition of any explicit theories for interpreting the data and information.

Preliminary findings were interactively examined through a series of exchanges with ministry officers and other stakeholders, allowing observations to be validated while deepening analyses of potential domain-specific issues. Through triangulation between contextual elements (demography, economy, culture, and society), analysis of the education system performance, and verification of findings through stakeholder interviews, the review resulted in a series of recommendations to address the issues identified in each policy domain.

4. Boundaries and limitations

This review is based on, but not limited to, evidence-based research and the numerous consultations and interviews that took place during the field missions, and via telephone and email. The review was designed to explore the five national priority domains and to present a realistic and objective portrait of it. This type of analysis requires significant access to primary data, a long timeframe, and several opportunities to meet stakeholders.

It should be acknowledged that a number of limitations have been identified by the review team, including:

Short time frame

The field visits were conducted over a very short timeframe. In fact, for the fact-finding mission, the time spent in interviews equated to only five days. This limited timeframe for interviews significantly limits the scope of the review.

Limited coverage of stakeholders

Due to the limited timeframe, the scope of consultations and visits was also restricted.

The interviews were mainly conducted from the capital city, Lusaka. While the review team met almost all the main educational stakeholders working in Lusaka, no visits have been conducted at sub-national level. Even in Lusaka, school visits were limited to two sites only.

Interviews mostly involved government officials, which may have introduced a bias in the information collected.

Data limitation

The review team found it difficult to gain access to current data. While some recent data were found in country documents, Zambia has not submitted them to UNESCO's Institute for Statistics, which makes it difficult to compare Zambia's situation with that of other countries. This meant that the review team often had to rely on old data and documents. However, it is important to note that discussions with different stakeholders, during the review mission, suggested that, in many cases, the trends and findings from most of these documents are still valid. Nevertheless, this lack of up-to-date data may have affected the analysis of policy achievement and the possibility to draw reference to specific data or information to validate the review's findings. This remains an area for improvement, as addressed in-depth in Chapter 3.

Given the above limitations, the review necessarily leaves room for much deeper analysis. Indeed, further areas for research have been identified by the review team. The review is thus designed to contribute to the Zambian vision for education and the national agenda for achieving the Education 2030 goals, by providing a solid platform on which updated and ongoing analysis of the most pertinent issues identified here can be built. With a window open to potential reform opportunities, it is hoped that the review provides the necessary impetus for national actors to address fundamental issues and press forward in achieving Zambia's national vision.

Chapter 1
Context of Education Development

This section provides a short overview of the key national characteristics that shape the configuration and development of Zambia's education system. First, it presents a brief account of the most salient contextual characteristics of Zambia in relation to its demography, economy, and society. Second, it outlines the political and institutional configuration of the Zambian education system.

1.1 The country

Zambia, known officially as the 'Republic of Zambia', is a landlocked country in the southern part of Africa with a total surface area of 752,618 square kilometres.

It shares its borders with eight countries, namely: the Democratic Republic of the Congo (1,930 km) and Tanzania (338 km) to the north, Malawi (837 km) and Mozambique (419 km) to the east, Zimbabwe (797 km) and Botswana (0.1 km) to the south, and Angola (1,110 km) and Namibia (233 km) to the west. Zambia is divided into 10 administrative provinces: Central, Copperbelt, Eastern, Luapula, Lusaka, Muchinga, Northern, North-Western, Southern, and Western. Lusaka is the capital city and also the political and administrative centre of Zambia. It is home to the legislative, executive, and judicial branches of the Zambian government.

Political activity in Zambia takes place within the framework of a presidential representative democratic republic, within which the president is both head of state and head of government. Executive power is exercised by the government, while legislative power is vested in both the government and

Figure 1 Map of Zambia

the parliament. The president is elected by popular vote for a five-year term (to a maximum of two terms). The vice president is automatically appointed as the winning presidential candidate's running mate in the elections. The legislative branch consists of a single-chamber national assembly (with 164 seats: 156 members elected by popular vote and eight appointed by the president, all serving five-year terms). The judicial branch comprises a constitutional court, a supreme court (comprising nine judges), a court of appeal and subordinate courts (high court, magistrates' courts, and local courts). The judges are appointed by the president and ratified by the national assembly.

Since achieving independence, Zambia has been known as a peaceful and generally trouble-free country, certainly compared to most of the eight countries with which it shares the borders. Zambia has also striven to strengthen governance and democratic processes, with government institutions developing and reinforcing transparency and accountability efforts.

Demography

Zambia has witnessed significant growth in population over the last five decades, from 3.1 million in 1960 to 15 million people in 2015 – an estimated increase of 388 per cent (Zambia Central Statistical Office, 2014). With an average annual growth rate of about 3 per cent, the Zambian population doubled between 1988 and 2015. Males represent 49.3 per cent and females 50.7 per cent of the total population. Current population density is 20.5 people per square kilometer. According to the 2010 census of population and housing, some 61 per cent of the population live in rural areas while 39 per cent are in urban areas.

Zambia's population is young and distributed as follows: below 15 years (46.2 per cent); 15–24 years (20 per cent); 25–54 years (28.5 per cent); 55–64 years (2.9 per cent); and 65 years and over (2.4 per cent). The median age is 16.7 years. This distribution is illustrated by the population pyramid below, which indicates a very high dependency ratio of 96.4 per cent (the youth dependency ratio is 91.3 per cent, compared to an elderly dependency ratio of 5.1 per cent). Such a population structure is the result of a combination of a high birth rate (42.46 births/1,000 population) and a very low life expectancy at birth (51.83 years). The resulting high youth dependency ratio constitutes a huge challenge for education provision.

Zambia is among the countries most affected by HIV/AIDS, with an adult prevalence rate of 12.7 per cent. It is estimated that 1,106,400 people live with HIV/AIDS in the country. In 2012, the number of deaths due to HIV/AIDS was 30,300.

Figure 2 **Pyramid of Zambian population**

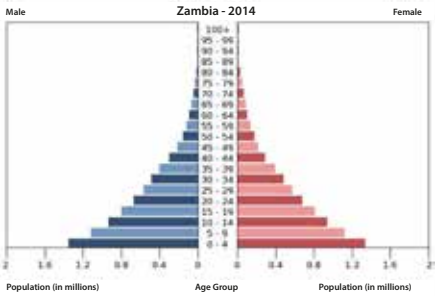
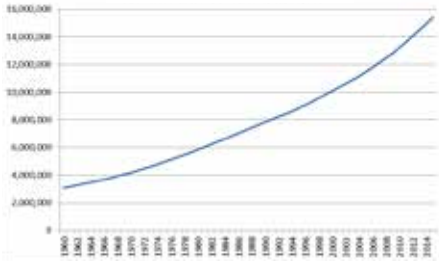


Figure 3 **Growth in Zambian population (1960–2015)**



Economy

Zambia's economy has experienced mixed development in the years since independence in 1964. The first 10 years following independence were notable for considerable social and economic expansion. The following years were characterized by slow economic growth, up until the mid-1990s, mostly due to a massive increase in the oil price in 1973, followed by a slump in copper prices in 1975, which resulted in a reduction of export earnings and a huge external debt. The GDP growth rate averaged 3.5 per cent between 1995 and 2000, and reached 5.8 per cent for the period 2000–2005.

Table 1 **Trends in GDP growth (2005–2015)**

	2005	2007	2009	2011	2012	2013	2014	2015	2016
GDP growth rate (%)	7.2%	8.4%	9.2%	5.6%	7.6%	5.1%	5.0%	3.6%	3.4%
GDP per capita, current prices (US$)	691.8	1,103.5	1,134.8	1,635.5	1,724.7	1,839.5	1,726.0	1,350.2	1,143.6
Population (millions)	12.0	12.7	13.5	14.3	14.8	15.2	15.7	16.2	16.7

Note: Shaded cells indicate IMF staff estimates.

Source: International Monetary Fund, World Economic Outlook Database, April 2016.

Economic performance has also been impressive over the past decade, with an average annual real GDP growth rate surpassing 7 per cent during this period. This has largely been driven by growth in construction, transport, communications,

the public sector, trading, and mining. Mining remains a driver of investment to other sectors, especially construction, transport, and energy. Copper is the country's mainstay, contributing about 70 per cent to export earnings. However, over the last few years, non-traditional exports have grown substantially. Over the last two years, the pace of economic activity has been dampened due to lower copper prices, electricity shortages, and poor rainfall, putting the Zambian economy under intense pressure. The real GDP growth has been revised downwards at 3.6 per cent in 2015, and projected to 3.4 per cent in 2016 (IMF, 2016). However, according to an IMF recent mission (March 2016), Zambia's current economic challenges can be overcome with resolute policy action, allowing a resumption of growth in line with the country's abundant potential.

The Zambian economy has been relatively resilient to the global crises of recent years, and its performance has allowed the country to move from a low-income country to a prospering lower-middle income country. Agriculture remains the most important sector from a socio-economic point of view, accounting for 18 per cent of the country's GDP and providing work opportunities for 60 per cent of the country's informally employed population of 4.9 million and 8 per cent of the 625,000 formally employed (Rasmussen et al., 2014). Increasing youth employment remains one of the biggest challenges.

Despite this robust economic performance, poverty remains widespread, with 60.5 per cent of the population below the poverty line. Although this indicator shows steady decline, from 69 per cent in 1996 and 64 per cent in 2006, these improvements have mostly benefitted urban areas (Rasmussen et al., 2014). Only a quarter of urban dwellers are poor, compared to three-quarters of rural Zambians who live in poverty.

Societal aspects

Zambia's population comprises more than 70 Bantu-speaking ethnic groups, with language, and, often, sense of national identity, determined largely by geographical location. Zambia's Bantu languages were introduced and developed gradually through migration, language contact, and other changes, over a period of 2,000 years. From the late 19th century on, missionary activity and colonization by the British led to European languages being introduced in Zambia. English still plays an important role in Zambian national culture. For nearly three decades following independence, English was the only official language. This situation remained unchanged until the introduction of multi-party democracy in 1991, when emphasis shifted towards the promotion of Zambia's seven national languages: Bemba, Nyanja, Tonga, Lozi, Lunda, Luvale, and Kaonde, which serve also as official languages.

Religion has a significant role in Zambian society. According to the Bureau of Democracy, Human Rights, and Labour (2013),[2] approximately 87 per cent of the population are Christian, less than one per cent are Muslim, and 12 per cent adhere to other belief systems, including indigenous religions. Many people combine Christianity with indigenous beliefs.

Muslim communities are primarily concentrated in Lusaka and in the Eastern and Copperbelt provinces. Many are immigrants from Somalia, the Middle East, and South Asia, who have acquired citizenship, and a small minority are indigenous. Somali immigration has increased significantly in recent years, with the majority living in Ndola and Lusaka. Small communities of Hindus, Buddhists, Jews, and Sikhs also can be found nationwide.

Questions of language and belief have played an important role throughout modern Zambian history. Following independence, the question of national identity of the new state took centre stage and language and belief became central elements in this debate, as well as for communication, culture, and education.

1.2 Overview of the education system

This section provides an overview of the Zambian education system's regulations, governance, and organizational arrangements, with particular emphasis on school provision. Three aspects, in particular, are described: the constitutional and legal framework; the governance structure, in terms of decentralization and liberalization as well as education policy and planning; and, finally, the organization and main characteristics of the national system of education.

Constitutional and legal framework

Zambia's constitution of 1964 makes provision for equal and adequate educational opportunities in all fields and at all levels in the form of directive principles. This legal provision for education was also contained in the Education Act of 1964, and the Education Act of 2011, which now governs the financing and management of education in Zambia. This Act:

- Firmly asserts a person's right to early childhood care, development and education, as well as basic education, including adult literacy education and high school education.

2 http://www.state.gov/j/drl/rls/irf/religiousfreedom/index.htm?dlid=148728&year=2010#wrapper

- Recognizes a child's right to free basic education, makes it compulsory, and places the burden of responsibility on the parent to ensure that a school-age child attends school.

The Act provided a firm legislative basis for implementation of the Government's free basic education policy. Under this legislation, the Government is obliged to make general and vocational education progressively more available and accessible to all people.[3]

The new Education Act has enough protection and provision for education to ensure progress towards national and international goals. In addition to providing every individual with a right to education, the Act also guides authorities in ensuring equality of access to education for children with special educational needs (SEN) and promotes affirmative action in relation to this category of learners, including identification, diagnosis, and assessment for the placement of SEN learners. Other matters, for example the decentralization of education services and MoE policy instruments such as re-entry policy, were also included in the new Education Act.

Zambia is also signatory to many international conventions that have guided the country's approach to the provision of social services such as education. These include the Convention on the Rights of the Child, the African Charter on the Rights and Welfare of the Child, and the International Covenant on Economic, Social, and Cultural Rights, among others. Zambia has also been party to the 1989 UNESCO Convention on Technical and Vocational Education since 26 April 1995.

Despite this favourable legal framework, Zambia remains outside the 1960 UNESCO Convention against Discrimination in Education, and subsequently did not report to UNESCO on measures taken to implement the 1960 UNESCO Recommendation against Discrimination in Education within the framework of the sixth (1994–1999), seventh (2000–2005), or eighth (2006–2011) consultations of member states on this matter. Nor did Zambia report to UNESCO on measures taken for the implementation of the 1974 UNESCO Recommendation on Education for International Understanding, Co-operation and Peace and Education Relating to Human Rights and Fundamental Freedoms, within the framework of the fourth (2005–2008) or fifth (2009–2012) consultations of member states.

However, while Zambia did not report to UNESCO on measures taken to implement the 1976 UNESCO Recommendation on the Development of Adult Education within

3 National report submitted to Universal Periodic Review in 2012, p 4: http://www.upr-info.org/sites/default/files/document/zambia/session_14_-_october_2012/ahrcwg.614zmb1e.pdf.

the framework of the first consultation of member states (1993), it did report within the framework of the second consultation (2011).

Education governance in Zambia

Brief overview of governance in Zambia

As a unitary State and constitutional democracy, Zambia acknowledges the supremacy of the constitution in its governance. In terms of governance practice, a situational analysis by the United Nations Development Programme (UNDP, 2012) indicated a gap between public expectations and the provisions of the constitution, particularly in relation to inclusive governance. This analysis also revealed that public sector service delivery has, over the years, been sub-optimal despite the fairly high technical skills base and the existence of implementable policy frameworks and national plans. Very low public participation/engagement in national processes was also observed, despite the existence of national and local government policies and legal frameworks for broad-based participation. The main factors inhibiting public participation/engagement were found to include poor access to information, a weak civil society, and general public apathy due to limited civic education. Because of these factors, low levels of public participation/engagement in national processes affects the sense of ownership and the effectiveness of public policy and programme formulation and implementation, as well as accountability for results (UNDP, 2012). This review focuses on issues related to education governance in Zambia.

Education governance

Education governance refers to the way that the funding, provision, ownership, and regulation of education and training systems are managed at local, regional, national, and supranational levels (NESSE, 2015). While, in many countries, the central government continues to be the major actor in coordinating education service delivery, there is a global trend towards the devolution of responsibilities in this area, with a view to addressing issues related to efficiency, effectiveness, accountability, and democracy. To this end, most countries have developed policy frameworks that allow different stakeholders (parents, communities, private actors, NGOs, etc.) to be involved in different aspects of education governance.

The 1996 Zambian national policy on education included, among the general principles of education governance, liberalization and decentralization. Liberalization means that private organizations, individuals, religious bodies, non-governmental organizations (NGOs), faith-based organizations (FBOs), community-based organizations, and local communities have the right to establish and control their own learning institutions. Decentralization involves the ministry devolving power

from the centre to local levels to allow various stakeholders to share in decision-making and take responsibility for education at local level.

Liberalization of education and supervision of private educational institutions

While the liberalization of the education sector has led to a proliferation of private educational institutions at primary, secondary, and tertiary levels, these institutions still lack a planning, regulatory, and monitoring framework and structure, at both legal and administrative levels. The Education Act merely provides guidelines for registration and rules for the establishment and administration of private educational institutions. While the ministry defines the minimum requirements for registration and grants certificates to eligible private institutions, it expects these institutions to provide their own educational materials and determine their own standards and level of certification. Although many private schools operate in an environment unconducive to quality learning, do not meet minimum standards, and employ teachers with inappropriate qualifications, the ministry lacks the legal remit to supervise or monitor them (Beyani, 2013).

Evidently, in a liberalized school system, the ministry should not attempt to control and manage private institutions. Nevertheless, legal provision should be made for the education authority to ensure that national and international standards are guaranteed and learners' rights are well protected. This is a major challenge for the ministry, particularly in the context of staff shortages which affect its capacity to provide proper supervision of private institutions.

According to UIS (2015), the share of private enrolment in primary schools stood at three per cent, which is well below the sub-Saharan African average of 11 per cent.

Education decentralization in Zambia

Overview of decentralization policy in Zambia

Since independence in 1964, Zambia has undergone five rounds of policy reforms intended to bring about greater decentralization of public services, including education. The reforms have involved a combination of deconcentration, delegation, and devolution (Mukwena, 2001). The results have been mixed. A number of studies have found that the anticipated outcomes have not been achieved, since no meaningful improvements have been recorded in public service delivery as a result of decentralization policy. The failure has mostly been attributed to the lack of resources, poor accountability mechanisms, weak institutional capacity, and worsening fiscal bottlenecks at district level (Sikayile, 2011). According to Mukwena (2001), the decentralization reforms appear to have been driven more by political expediency than by the need to improve the administrative performance of local government.

This helps explain why some of the decentralization measures have not lived up to their officially stated objectives.

The current (fifth) set of decentralization reforms, adopted in 2002, was integrated into the national development agenda in the framework of PSRP (2001-2002), while keeping consistency with the 1996 National Education Policy, which guided the '*Restructuring and Decentralisation of the Ministry of Education in 2000*'. The policy was designed as a gradual process, suggesting awareness of the complexity inherent in decentralization policy reforms, as indicated by experiences throughout the world. According to Sikayile (2011), the fact that decentralization was part of a wider political and economic reform process makes it unlikely that due attention was given to choosing the most appropriate approach for Zambia or to assessing what are likely to be its far-reaching implications.

Foundation for educational decentralization

The current form of educational decentralization in Zambia is based on the national education policy of 1996 , the objectives of which included the restructuring of the Ministry of Education in order to address the challenges inherent in a centralized system, namely high levels of inefficiency and marginalization of communities in planning and decision-making. The process was consolidated with BESSIP in 1999 and through the establishment of district education boards (DEBs) in 2003, in order to implement the policy and create synergy between central government and local communities in education service delivery. It was through BESSIP that government provided operational structure, funding modalities, and strategic directions for the implementation of the decentralization policy. These mechanisms were further reinforced by the development of the MoE Strategic Plan (MoESP) 2003–2007. Educational decentralization was also adopted as a strategy to accelerate progress towards EFA, by improving access to basic education and its quality, especially in rural areas.

The need for effective decentralization in the education sector was further emphasized in both the FNDP of 2006 and the SNDP of 2010, which emphasized a participatory approach to planning and decision-making as a means of improving education service delivery, particularly at the local level. This has led, for example, to the creation, by the MoE, of education management committees at provincial and district levels, in order to facilitate the deconcentration and devolution of educational responsibilities (GRZ, 2006). Similarly, the education component of the SNDP gave renewed impetus to educational decentralization, particularly with the development of the MoE Sector Devolution Plan (MoE, 2010).

Zambia's decentralized governance structure

Through the decentralization policy, the Zambian Government established three levels of educational governance: the national MoE headquarters in Lusaka; nine provincial education offices (PEOs); and 72 district education boards (DEBs). According to *Educating Our Future*, the MoE is responsible for enacting laws, developing policies, formulating national plans, procuring and allocating resources, developing curricula, setting national standards, and conducting monitoring and evaluation (MoE, 2012a).

The concrete manifestation of education decentralization in Zambia was the establishment of DEBs, which constitute the administrative epicentre for transforming policy intention into practice. The adoption of education decentralization entailed re-structuring the MoE at different levels (national, provincial, and district) to re-align it with the objectives of decentralization and to allow effective and efficient functioning of DEBs.

Each DEB is composed of two teams: (i) the management team, whose members are MoE employees by virtue of the institutional line of command; and (ii) the governance team, comprised of members appointed or co-opted to the board by the Minister of Education.

The management team forms the administrative wing and is expected to carry out the day-to-day management functions on behalf of the board. The governance manual stipulates that the Management Team includes the DEB secretary, who is accountable to the Provincial Education Officer (PEO). The DEB secretary is the head of the district education department to whom all junior officials within the management team, such as the planning, accounts, infrastructure, and human resource officers report. The District Education Standards Officer (DESO), the senior inspector of standards in basic schools, is second in command to the DEB secretary (MoE and SNV, 2008).

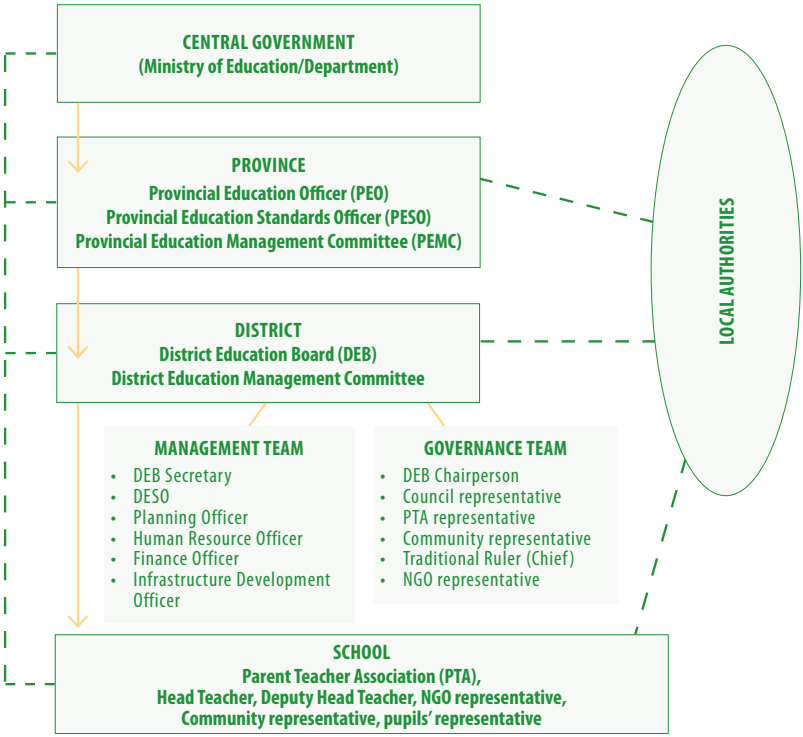
The governance team is headed by the board chair who serves ex-officio on behalf of the entire DEB body. Its membership includes appointed officials from the district council, community-based organizations, the private sector, and traditional leaders. The governance team is the policy-making body of the DEB, while serving also as a community mouthpiece to influence management decisions within the board. Because funding from the government is inadequate, governance members are also expected to mobilize local resources to support the operation of the board.

According to the policy, the two DEB bodies are expected to work together to carry out the responsibilities delegated to them by MoE headquarters. Their collective action is mostly in evidence during quarterly full board meetings and through

participatory planning and monitoring of school operations. The diagram below illustrates the Zambian education governance structure and DEBs' links to high- and low-level units and actors.

An in-depth review of Zambia's decentralization policy is provided in the third chapter of this report, in the context of system-wide policy and planning.

Figure 4 Governance structure showing different actors at the district level[4]



Source: Sikayile, 2011.

4 This governance structure shows a clear distinction between the management team members as well as the governance board. In terms of functions, the management team members are the administrative organ, while the governance team members save as the policy making body of the board. Despite their distinctive roles, both the board secretary and the chairperson are in practice support to work hand in hand in providing leadership for the board.

Education policy and planning

Education policy development in Zambia has evolved with the political history of the country. According to Beyani (2013), four major periods can be identified:

(i) Colonial era education policies (1890–1963): During the early phase of this period, policy was limited to the provision of rudimentary education for Africans, by missionary pioneers, with the aim of facilitating the spread of Christianity. After the Second World War, education policy objectives expanded to meet the basic needs of state institutions such as the police, the colonial military, and primary schools.

(ii) The United National Independence Party or Kaunda era (1964–1990): To mitigate years of colonial neglect, government policy committed to providing free education up to tertiary level, with the aim of reducing the country's dependence on expatriate manpower. The only policy guides were the ruling party manifesto and the Education Act of 1964, both of which had no precise targets other than to provide free education for all citizens. This period witnessed remarkable developments in terms of education infrastructure, increased enrolment, the foundation of the University of Zambia, and the establishment of a number of technical schools.

(iii) The era of liberalization under the movement for multi-party democracy (1990–2011): While much of the school system remained in public hands, the government lost its monopoly of control over education. Private and community schools were allowed to deliver education services, alongside public and church schools. This period was also marked by growing poverty and underinvestment in education (particularly between1991 and 2001), following a period of steady economic decline due to the fall of copper prices in 1976 and subsequent structural adjustment in the 1980s. In response to declining trends in education delivery and performance, the government undertook considerable policy development and reform efforts, including: (a) the Educating Our Future education policy (1996) to give direction to education service delivery; (b) the Basic Education Sub-Sector Investment Programme (BESSIP) to address declining standards and infrastructure in primary/basic schools; (c) a science policy, developed in 1996, to encourage science education in schools; (d) free basic education in 2003; and (e) an infrastructure development plan developed in 2009.

The international environment gave further impetus to policy reform by shifting focus to specific targets in education within the framework of MDGs and the EFA goals.

While these policy initiatives yielded significant results in terms of increased enrolment, improved infrastructure and teaching materials, and recruitment of trained teachers, challenging issues remained, particularly with regard to education

quality and learning outcomes. With the elimination of school fees in 2002, many schools have been unable to cover their operational costs through the new government grant scheme, affecting the quality of education delivered. Because of this, a number of schools have continued to charge a variety of user fees, despite the free education policy. Another issue has been that the education reforms of 1996, which proposed the transformation of primary schools (Grades 1–7) into basic schools (Grades 1–9), and secondary schools (Grades 8–12) into high schools (Grades 10–12), did not achieve the expected results, since only 37 per cent of primary schools and 36 per cent of secondary schools complied with the directive. These reforms have also resulted in challenges in terms of the demand for suitably qualified teachers (for Grades 8–9 that require specialised teachers) as well as for appropriate infrastructure such as laboratories, workshops, desks, and other specialized rooms and facilities for high school Grades 10 to 12. All these challenges have compromised the quality of teaching and learning, as evidenced by the results of the national assessment surveys between 2003 and 2008, which showed that learners' performance levels remained stable at 40 per cent (NIF III, 2011–2015).

(iv) The Patriotic Front (PF) government era (2011–present): The policy changes in this era were a direct response to the challenges encountered in the previous period, namely issues of quality and relevance of education. Within the framework of NIF III, government policy is seeking to address the challenges that have contributed to the failure of previous initiatives. These include low level commitment among many education providers, inadequate preparation, and insufficient financial, material, and human resources. With the government committed to allocating more resources to the education and skills sector, the policy shift outlined in the 2011–2015 education sector plan (NIF III) seeks to expand early childhood education, re-introduce free basic education and make it compulsory, upgrade teacher qualifications to meet minimum standards, and promote equitable access to quality education and skills training to enhance human capital for economic development.

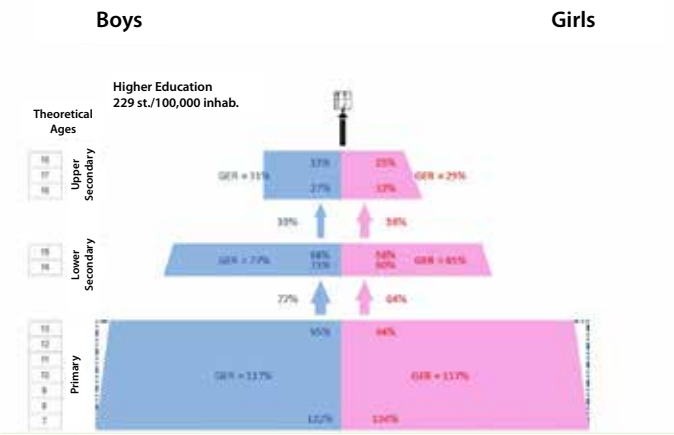
With regard to education structure, the old primary (Grades 1–7) and secondary (Grades 8–12) education system was reintroduced in 2011 in order to address the constraints related to infrastructure and teacher deployment. On the administrative side, the two ministries (MoE and MSTVT), which operated separately up to 2010, were merged to form the MESVTEE. The public financing system has also been reformed with the introduction of output-based budgeting (OBB).

It is important to note that, since November 2015, the MESVTEE was reorganized and separated into two Ministries: the Ministry of General Education (MoGE) and the Ministry of Higher Education (MoHE).

Status and trends in education provision

Like many other developing countries, Zambia's education system is characterized by a broad base (representing primary level) and a sharp apex (representing higher education). The Zambian formal education system consists of five levels: pre-school, primary education, lower secondary education, upper secondary education, and tertiary education (see *Figure 5*).

Figure 5 Structure of the Zambia's education system



Source: UNESCO, IIPE/Pôle de Dakar, 2013.

The education system starts with four years of pre-school education, which are optional for children aged between 2 and 6. The core education system has a 7-5-4 structure, meaning seven years at primary school for children aged 7–13, two and three years at lower (ages 14–15) and upper (ages 16–18) secondary school, respectively, and four years at university for undergraduate degrees. Progression from one level to another depends on national examinations, overseen by the government, at Grades 7, 9 and 12. This means that not all children are expected to proceed to secondary education.

As illustrated in *Figure 6*, after completing lower secondary education (Grade 9), all students take an examination to receive their certificate of lower secondary education. Based on the results of this examination, students are then enrolled in upper secondary education or in TEVET schools.

Figure 6 An outline of Zambia's education structure

<table>
<tr><th>Age</th><th>Education year</th><th>Structure</th><th colspan="2">Type of schooling</th><th>Others</th></tr>
<tr><td>25</td><td>19</td><td rowspan="7">4 YEARS
(Minimum)</td><td rowspan="7">Tertiary education
(doctorate, master's, and bachelor's degrees)</td><td></td><td rowspan="15">CONTINUING EDUCATION</td></tr>
<tr><td>24</td><td>18</td><td></td></tr>
<tr><td>23</td><td>17</td><td></td></tr>
<tr><td>22</td><td>16</td><td rowspan="3">Various training programmes</td></tr>
<tr><td>21</td><td>15</td></tr>
<tr><td>20</td><td>14</td></tr>
<tr><td>19</td><td>13</td><td></td></tr>
<tr><td>18</td><td>12</td><td rowspan="3">3 YEARS</td><td rowspan="3">Upper secondary education
(Grades 10-12)</td><td rowspan="3">Various vocational training programmes
(TEVET)</td></tr>
<tr><td>17</td><td>11</td></tr>
<tr><td>16</td><td>10</td></tr>
<tr><td>15</td><td>9</td><td rowspan="2">2 YEARS</td><td colspan="2" rowspan="2">Lower secondary education
(Grades 8-9)</td></tr>
<tr><td>14</td><td>8</td></tr>
<tr><td>13</td><td>7</td><td rowspan="7">PRIMARY 7 YEARS</td><td colspan="2" rowspan="7">Primary education
(Grades 1-7)</td></tr>
<tr><td>12</td><td>6</td></tr>
<tr><td>11</td><td>5</td></tr>
<tr><td>10</td><td>4</td></tr>
<tr><td>9</td><td>3</td></tr>
<tr><td>8</td><td>2</td></tr>
<tr><td>7</td><td>1</td></tr>
<tr><td>2-6</td><td colspan="5">Pre-school education</td></tr>
</table>

Source: Educational Statistical Bulletin (Ministry of Education, 2004).

Currently, however, the government is striving to ensure the provision of free and compulsory primary education. The enrolment patterns described in *Figure 5* illustrate the structure of Zambia's education system, indicating entrance age, duration of each level of education, and the enrolment status for each level.

After experiencing serious educational challenges in the form of declining enrolment rates, low quality, inadequate infrastructure, shortage of qualified teachers, and lack of learning materials during the 1980s and 1990s, Zambia's education sector has achieved noticeable improvements in its key indicators, at all levels. Since 2002, when the government announced its free primary education (FPE) policy, the Ministry of Education, Science, Vocational Training and Early Education (MESVTEE) has registered over 1.2 million more learners, increasing Zambia's net enrolment from 71 per cent in 1999 to over 97 per cent in 2013 (Zambia EFA 2015 Review, 2014).

Chapter 2
Education Sector: Overall Appraisal

This chapter provides a comparative analysis of the education system in Zambia, benchmarking it internationally in relation to five key performance criteria, namely *access*, *quality and relevance*, *equity*, *effectiveness,* and *efficiency*. The assessment of achievements against each of these criteria is obviously constrained by the availability of international comparative data. A number of neighbouring countries have been selected for the purposes of comparison: Botswana, the Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, and Zimbabwe. Regional comparisons are also drawn. As *Table 2* illustrates, Zambia occupies a lower-middle position in terms of GDP per capita and the EFA Development Index, ranking well above the average for sub-Saharan countries.

Table 2 Development measures – comparator countries/regions

Country/Region	GDP per capita	Human Development Index	EFA Development Index
	US $ (World Bank, 2014)	Rank (1 to 187) (UNDP, 2013)	% (2011/2012)
Malawi	253.0	174	51
Madagascar	449.4	155	60
DRC	475.2	186	34
Mozambique	619.0	178	44
Zimbabwe	935.9	156	76
Lesotho	995.5	162	73
Tanzania	998.1	159	58
Zambia	**1,801.9**	**141**	**77**
Swaziland	2,682.3	148	72
Namibia	5,719.6	127	84
Angola	5,935.7	149	44
South Africa	6,477.9	118	89
Botswana	7,757.0	109	85
Mauritius	10,005.6	63	91
Seychelles	15,359.2	71	91
Sub-Saharan Africa	**1,781.0**		**57**

2.1 Access

This section assesses access to and participation in education in Zambia. Access to education concerns the extent to which educational facilities and opportunities are available to the people who need them. It is commonly measured by indicators such as apparent intake rate and net intake rate, and, for secondary education, by transition rate. Participation in education concerns the degree to which the population takes part in and makes use of the available education services. Common indicators of participation include gross enrolment ratio, net enrolment ratio, and age-specific enrolment ratio.

Early childhood care development and education

Government investment in early childhood care development and education (ECCDE), through MoGE and the Ministry of Community Development, Mother and Child Health (MCDMCH), complements that of the private sector, which continues to play a vital role in the delivery of ECCDE services. Despite government efforts, in the form of the construction of 20 model ECCDE centres in 2014 (with another 60 projected under the 2015 budget), the hiring of 1,000 teachers, and the development of an ECCDE curriculum, Zambia has not been able to achieve the EFA goal related to ECCDE.

In fact, the proportion of Grade 1 entrants with ECCDE experience declined from 15.9 per cent in 2004 to 14.8 per cent in 2013, far away from the EFA target of 50 per cent agreed in Dakar (2000). As *Table 3* shows, from a regional perspective, participation in ECCDE in Zambia is below average (based on the data available). It is not only below the values found in the group with higher GDP per capita than Zambia, but also in Lesotho and Tanzania, which have lower GDP per capita (see *Table 2*).

The provision of ECCDE is threatened by weak policy direction and the government's long-standing non-participation in the sub-sector. The fact that responsibility for ECCDE is spread across two ministries has created additional bottlenecks and policy dissonance. The ECCDE sub-sector, furthermore, faces a number of specific challenges, including: (i) a low participation rate further compounded by non-participation of the government, adversely affecting poor families in particular; (ii) the absence of a centrally developed common curriculum; (iii) inadequate infrastructure with no standard prescribed curriculum suitable for young children and learning purposes; (iv) inadequate funding for early childhood education; and (v) under-qualified teachers (Zambia EFA 2015 National Review).

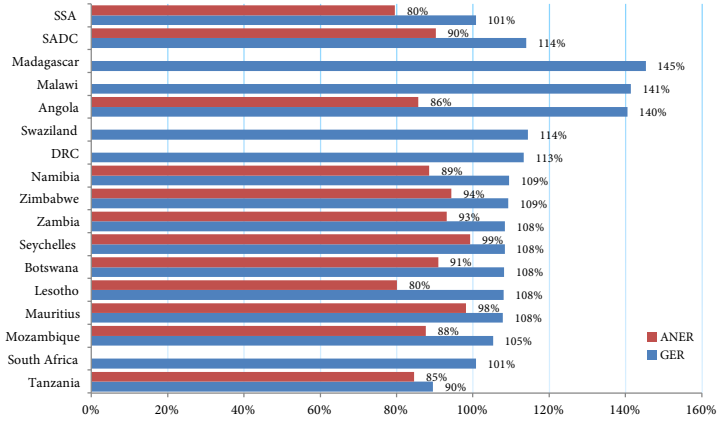
Table 3 Gross enrolment rates (%) in pre-school education

Country/region	2011	2012	2013
Madagascar	-	-	12.3
DRC	3.9	4.3	4.3
Zimbabwe		34.1	
Lesotho	40.5	40.7	36.8
Tanzania	-	34.3	32.9
Zambia	**-**	**-**	**14.8**
Swaziland	25.3	-	-
Namibia	-	15.9	-
Angola	86.5	-	-
South Africa	72.0	76.5	75.8
Botswana	-	16.0	-
Mauritius	113.3	113.7	112.8
Seychelles	109.5	113.4	111.4
Sub-Saharan Africa	**17.7**	**19. 6**	**17.9**

Primary education

More than a decade of concerted action has yielded significant improvements in access to and participation in basic education, though some challenges remain. The improvements resulted largely from the implementation of a number of government policies and programmes: free primary education (implemented since 2002); the Basic Education Sub-sector Investment Programme (BESSIP), 1999–2005; and the Ministry of Education Strategic Plan (MoESP), 2003–2007. These efforts were reinforced by the 2011 Education Act, which made primary education compulsory for all school-age children, outlawed the giving into marriage of school-age children, recognized community schools, implemented the re-entry policy for girls and vulnerable children, abolished the Grade 7 national examination fee, and introduced a school nutrition project in collaboration with the World Food Programme (WFP).

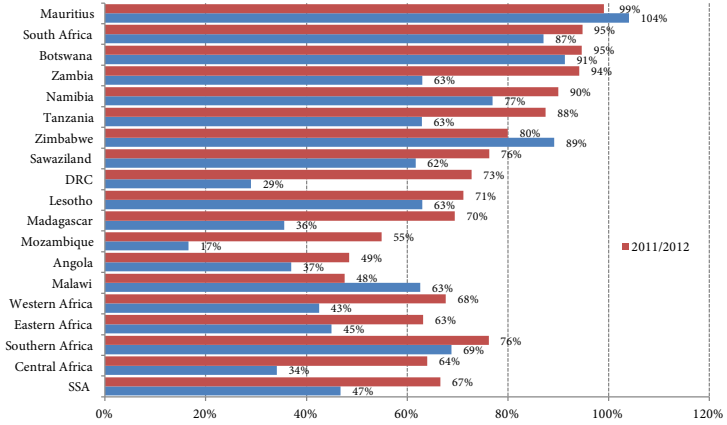
Figure 7 GER and adjusted net enrolment ratios (%) in primary education in 2013



Source: EFA Global Monitoring Report 2015.

In terms of enrolment, Zambia has made considerable progress[5] over the past decade. The primary gross enrolment ratio (GER) was estimated at 108 per cent and the adjusted net enrolment ratio at 93 per cent in 2013, moving the country closer to universal primary education, and justifying its ranking among the top 10 African countries in the EFA Development Index. As *Figure 7* and *Figure 8* illustrate, Zambia's primary-level GER and completion rates are above average for sub-Saharan Africa.

Figure 8 Trends in primary education completion rate in the SADC countries, 2000-2012



Source: UNESCO/Pôle de Dakar.

5 According to Zambia EFA 2015 National Review, the primary gross enrolment ratio (GER) increased from 105 per cent in 2004 to 127 per cent in 2014, and the completion rate is now close to 100 per cent.

As more and more children graduate from primary education, the focus of the education system shifts increasingly to lower secondary. Zambia is one of a growing number of countries in sub-Saharan Africa aiming for universal basic education, giving all children access to a full cycle of primary and lower secondary education.

Secondary education

Zambia's focus on basic education in recent decades has resulted in the relative neglect of the secondary school sub-sector. The expansion of secondary education has, therefore, been constrained by limited investment and resources, which have, in turn, reduced transition rates.

Almost 9 out of 10 children completing primary education transition into lower secondary education in Zambia

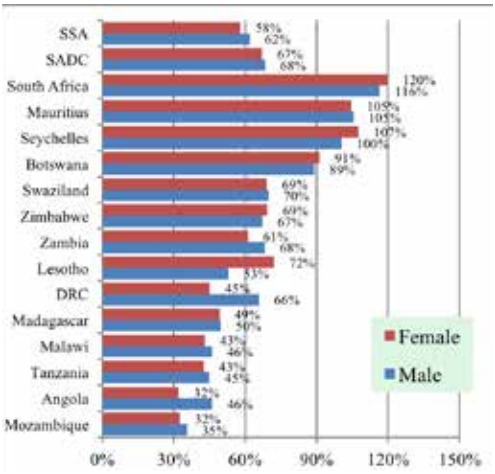
The proportion of children completing primary education (Grade 7) who made the transition into lower secondary education (Grade 8) increased from 53.5 per cent in 2004 to 89.4 per cent in 2014. A high transition rate is also observed in some of Zambia's neighbouring countries (*Table 4*). Given the general increase in primary completion rates and transition rates, more children are participating in lower secondary education, which explains the large increase in lower secondary gross enrolment rates. In fact, enrolment in lower secondary education (Grades 8 and 9) increased by 93 per cent, from 234,059 students in 2004 to 451,163 students in 2013. According to UNESCO, the estimated GER in lower secondary was 65 per cent in 2013 (*Figure 9*).

Table 4 Transition rate from primary to lower secondary education (%)

Country/Region	2012
Angola	44
Benin	79
Burkina Faso	51
Burundi	50
Cameroon	55
DRC	68
Lesotho	75
Madagascar	60
Malawi	73
Mauritius	72
Mozambique	52
Namibia (2009)	94
Swaziland	91
Tanzania	56
Zambia	59
Sub-Saharan Africa	**68**

Source: EFA Global Monitoring Report 2015.

Figure 9 Gross enrolment ratios in lower secondary education in 2013



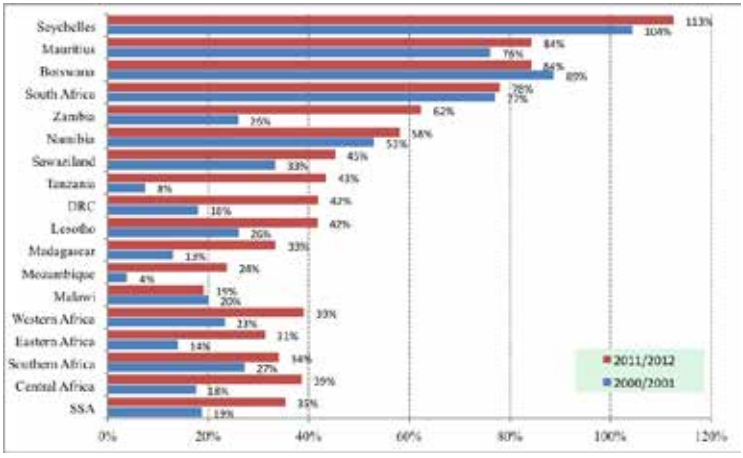
Source: EFA Global Monitoring Report 2015.

The Zambian Government's goal in promoting upper basic education is to ensure that more children complete a learning phase that equips them with productive skills. To achieve this goal, it must address key bottlenecks in terms of access to Grade 8, namely inadequate school infrastructure and the Grade 7 national examination that allows the rationing of the limited space available by pushing out children who do not achieve the required marks.

The completion rate for lower secondary has increased considerably, from 25.9 per cent in 2000 to 62.4 per cent in 2012, placing Zambia among the high performers in sub-Saharan Africa, where the regional completion rate was 35.3 per cent in 2012, and in the Southern Africa Development Community (SADC) sub-region, where the average was 34 per cent (*Figure 10*).

While transition from primary to lower secondary and the completion rate have increased, transition into upper secondary (Grade 10) remains a critical challenge. The available data show that the transition rate into senior secondary education has sharply decreased, from 50 per cent in 2007 to around 33 per cent in 2013, indicating that Zambia is having difficulty preventing children from dropping out. In other words, enrolment has increased, but many children still drop out before completing lower secondary education.

Figure 10 Completion rate for lower secondary education



Source: UNESCO/Pôle de Dakar.

For senior secondary education, the completion rate increased from 12 per cent in 2000 to 28.1 per cent in 2011 (UNESCO, Pole de Dakar, 2014), suggesting that

roughly 28 per cent of all children who enter the school system go on to complete secondary education.

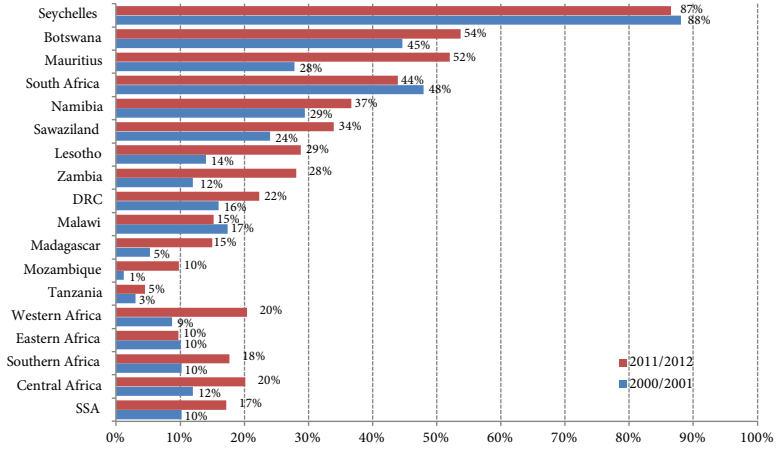
Table 5 Gross enrolment ratio for upper secondary education

Country/Region	2002	2012	2013
Malawi	13.4	16.9	19.4
Madagascar	–	19.3	22.2
DRC	–	37.2	36.9
Mozambique	2.7	12.4	12.9
Zimbabwe	30.7	36.6	–
Lesotho	22.9	39.3	–
Tanzania	–	10.2	9.2
Zambia	**–**	**32.9***	**32.6***
Swaziland	29.3	47.8	–
Namibia	31.7	–	–
Angola	11.1	–	–
South Africa	77.3	96.0	106.0
Botswana	58.8	–	–
Mauritius	71.0	89.2	–
Seychelles	51.0	63.1	48.1
Sub-Saharan Africa	**22.9**	**34.4**	**34.9**

Source: UIS estimates. * Zambia Educational Statistical Bulletin 2013.

While this result places Zambia above many countries in the region, some other countries do significantly better. The average completion rate for African countries was 17.2 per cent, while the average for the SADC sub-region was 17.7 per cent in 2012 (*Figure 11*).

Figure 11 Trends in completion rate for upper secondary education, 2000-2012



Source: UNESCO/Pôle de Dakar.

Secondary education in Zambia still faces a number of challenges, including limited infrastructure and space, a shortage of qualified teachers, and a lack of equipment, especially for the teaching of sciences and practical subjects (Zambia EFA 2015 Review, 2014). To address these challenges, the Zambian Government has shifted the focus of attention to secondary education in recent years. As part of NIF III, it has implemented ambitious policy reforms to revitalize the sub-sector, mostly through ensuring quantitative and qualitative improvements in service delivery. The policy reforms initiated under NIF III include the: (i) re-introduction of free and compulsory secondary education up to Grade 12; (ii) upgrading of community schools offering secondary education to fully fledged secondary schools; (iii) phasing out of upper basic education (Grades 8 and 9) from basic schools and the reintroduction of the conventional secondary education offering Grades 8 to 12; (iv) introduction of two-tier secondary education, with academic and technical routes; (v) re-orientation of the curriculum for secondary schools, putting emphasis on life skills subjects to enable learners to cope with the demands of self-employment and the labour market; (vi) upgrading of non-degree or diploma-holder teachers through in-service training (re-introducing the apprenticeship system); (vii) promotion of the teaching of science, mathematics, and technology; and (viii) improvement of learning outcomes (NIF III 2011–2015).

Tertiary education

In Zambia, tertiary education includes two groups of institutions: (i) the University of Zambia, the Copperbelt University, the Mulungushi University and 14 teacher training colleges, which fall within the purview of the Ministry of Education; and (ii) colleges registered under the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA). There are 151 TEVETA colleges offering diplomas in various fields. Nearly half are private, with the rest run by the government, religious organizations, or communities.

Universities are regulated by act of parliament and are autonomous in operation, though they are overseen and funded by the MoHE. Private universities, which have emerged since the 2000 reforms, seek accreditation from the MoHE. As of 21st March 2013, the parliament of Zambia enacted the 2013 Higher Education Act which provides for: (i) the establishment of the Higher Education Authority and define its functions and powers; (ii) quality assurance and quality promotion in higher education; (iii) the establishment, governance and regulation of public higher education institutions, and; (iv) the registration and regulation of private higher education institutions.

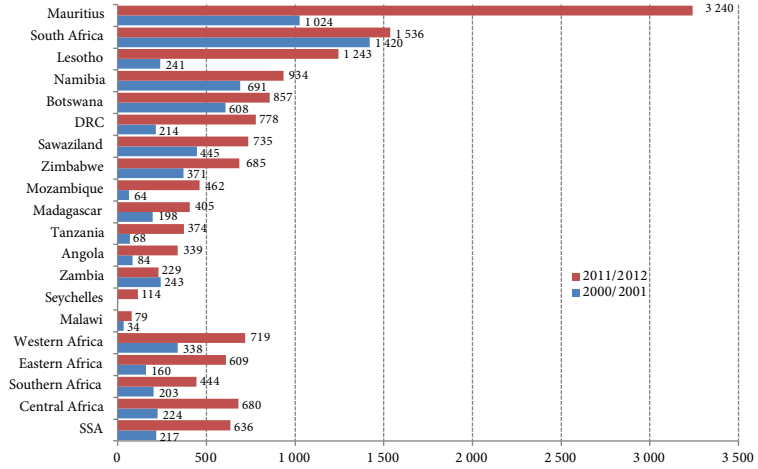
The structure of the Zambian education system raises concerns about access to higher levels of education, including secondary and tertiary (see *Figure 5*). The heavy base of the pyramid, reflecting the millions of children enrolled at primary level, sharply narrows to a pinpoint at the apex, suggesting low rates of transition from primary to secondary and from secondary to tertiary education. Indeed, only roughly 28 per cent of all children who enter the school system go on to complete secondary education. And only a small number of those who do also go on to complete tertiary education. It is estimated that only 8 per cent of primary school leavers access public universities (NIF III, 2011).

With only an estimated 229 students per 100,000 inhabitants, Zambia ranks among the African countries with the lowest rates of participation in higher education (*Figure 12*). To address this challenge, the Government of Zambia has begun to encourage private sector involvement in tertiary education. This has led to the emergence of 14 private universities, alongside one new public university, the Mulungushi University. As a result of this expansion, enrolment at university has increased from 14,000 students in 2008 to 20,000 students in 2010 (MESVTEE, NIF III, 2011).

Despite this increase in enrolment, educational opportunities beyond secondary school remain limited for young people who cannot access tertiary education either due to a lack of places or to inadequate bursary schemes. The competition for places is intense although, in principle, students are selected on the basis of ability. The bursary schemes, though desirable, are inadequate, unsustainable, and cumbersome

to access. Hence, the focus in this sub-sector is on infrastructure development and the introduction of loan schemes. A loan system is seen as a much more sustainable option, since money paid back by those who have graduated can be used as a revolving fund to support future students (ZANEC, 2012).

Figure 12 Number of students in higher education per 100,000 inhabitants



Source: UNESCO/Pôle de Dakar.

According to Beyani (2013), the tertiary sub-sector in Zambia suffers from inadequate faculty quality, insufficient classroom space, and poor curriculum relevance. Many institutions are in a state of disrepair, with broken down workshops and laboratories. Despite a decent nationwide student–lecturer ratio of 18:1, the quality of education delivery remains quite poor. The quality of teachers also raises concerns and poor living and working conditions often leave them dispirited (Beyani, 2013). While these challenges are noted in the Sixth National Development Plan (SNDP), it remains to be seen how far they have been addressed in implementation.

2.2 Quality and relevance

While significant progress has been achieved over the past 15 years, in terms of both access and participation, the quality and relevance of the education provided remain major challenges. Government efforts to expand access to school have sometimes come at a cost to educational quality. This is the case, for example, in the practice of multiple shifts, which reduces teacher-pupil contact time and related learning

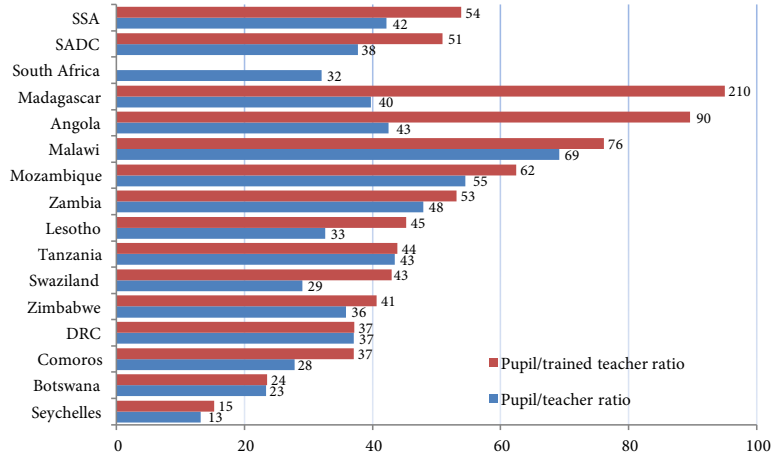
activities, while leading to a deterioration in the school environment. Because of lack of space, teachers often do not have space for preparation and, consequently, spend barely a few hours in public schools. This practice has reduced their commitment to building robust learning environments (Zambia EFA 2015 Review, 2014).

Teaching and learning conditions

Pupil-teacher ratios and average class sizes

While the pupil-teacher ratio has been stable in Zambian primary education (48:1 in 2002 and 2013), it remains higher than the average for SADC (38:1), the average for sub-Saharan Africa (42:1) and the international benchmark of 40:1 (UNESCO, 2015).[6] It is striking to note that, when considering the number of trained teachers, the ratio increases to 53:1 (*Figure 13*). In Zambia, the ratio suggests that classrooms are overcrowded, affecting teaching/learning conditions and quality. In addition, there are huge variations across localities and schools, with urban and peri-urban areas reporting ratios exceeding 100:1.

Figure 13 Pupil-teacher and pupil-trained teacher ratio in primary education, 2013



Source: EFA Global Monitoring Report 2015.

In Zambia, the same ratio (48:1) applied to lower secondary education in 2013. Zambia's lower-secondary class sizes were nearly twice as large as the average for sub-Saharan African countries (27:1).

6 http://unesdoc.unesco.org/images/0023/002327/232721E.pdf.

Instruction hours

The use of double- and even triple-shifting has led to concerns about the amount of instructional time in Zambia's schools, especially in highly populated schools in urban areas. These schools use instructional times that range from 2.30 hours to 3 hours for Grades 1-4. It means that not all subjects can be taught to the full achievement of educational goals. The new requirement, under the revised national curriculum, to increase instructional time from three to four hours for Grades 1 to 4, remains a challenge because of limited classroom space.

Teachers' qualifications

In 2010, about 97 per cent of government-employed teachers had the minimum academic qualification of a Form 5 or Grade 12 Certificate. The minimum qualification required at basic education level is a certificate in teaching. At this level, only 7.8 per cent of teachers were professionally unqualified, while about 2.5 per cent only had the preschool teacher's certificate. However, with regard to professional qualifications at secondary school, only 14.6 per cent of teachers were qualified to teach (i.e. they had Bachelor's degree qualifications). At preschool level, the largest number of unqualified teachers was found in the main urban provinces of Lusaka and Copperbelt. This is probably due to the need to recruit large numbers of ECCDE teachers to meet the expanding demand for preschool in these provinces. Furthermore, as the preschool sub-sector has only recently integrated with MoGE, its teachers' standards and qualifications have yet to be enforced. Another explanation may be that this part of the sector is mostly under private ownership (Beyani, 2013).

Subject-wise, the shortage of qualified teachers is most acute in mathematics and the sciences. Data show that, in 2010, only 183 graduate teachers specializing in mathematics were available to fulfil a requirement for 1,709, while only 607 graduate teachers specialized in the sciences were available, which is short of the 2,509 required. Similarly, only 885 teachers with degree qualifications in social science were available, compared to a requirement for 6,508. The 120 social science graduates produced each year by universities in Zambia is far from meeting the national demand for social science teachers at secondary school level (NIF III, 2011).

To address these challenges, MoGE has launched the Fast Track Training initiative for teachers of science and mathematics. MoGE also has commenced converting a number of colleges of education into universities of education, in order to increase the output of teachers with degree qualifications in mathematics, science, and social sciences.

Teacher education and supply

Pre-service training programmes

In Zambia, initial teacher training is provided at tertiary level, through teacher training colleges. The Government now requires all teachers to possess diplomas and degrees appropriate to their teaching positions. Teacher training colleges deliver pre-service training at certificate, diploma, and degree levels (Mubanga, 2012). In terms of teacher training capacity, there are 14 public colleges of education, ten of which train teachers for primary school (grades 1–7), and two for junior secondary (grades 8–9), while two provide in-service training. Teachers for senior secondary (grades 10-12) are trained at degree level in universities.

The entry requirements for primary teacher training include a Grade 12 certificate with at least three credits and two passes, including at least a pass mark in English and mathematics. The requirements and duration of secondary-level teacher training vary: (i) for diploma level, a three-year diploma (since 2005); (ii) for degree level, a four-year degree. It has been reported that most of the graduates from degree-level courses in education do not join the teaching profession. Hence, in 2010, the total number of teachers with university degrees was less than 2.5 times the annual output of graduates with education degrees from the university.

Despite some improvements in teacher supply in recent years, the annual average output from teacher colleges and universities does not meet the demand for teachers at different levels within the education system, due particularly to recent increases in the number of classrooms and pupil enrolment. In 2009, for example, the teacher shortage for primary and secondary schools amounted to 32,592 teachers, representing a shortfall of 68.8 per cent at primary level and 80 per cent at secondary level. Teacher shortages are more acute at senior secondary school level where teachers are expected to have a degree qualification in their teaching subjects. In 2010, only 16.5 per cent of 14,207 teachers in secondary school had a degree (NIF III 2011–2015, 2012).

In-Service education and training

In addition to teachers' pre-service education, there is a system of in-service education and training (INSET) or continuing professional development (CPD) for teachers. Its aim is to upgrade teachers' capacity, and sensitize and train them to implement new interventions, such as the introduction of a new curriculum. Two forms of INSET programme are offered: long-term and short-term. Long-term professional courses for school teachers are provided by the National In-service Training College (NISTCOL), the Zambia Institute of Special Education (ZAMISE), and the University of Zambia. Short-term INSET, in the form of capacity-building programmes, is

mostly provided through workshops and seminars in school or at teacher resource centres, with the aim of improving teachers' professional and classroom practice.

MoGE's CPD framework, the School Programme for In-service Training (SPRINT), is based on the government policy document *Educating Our Future* (MoE, 1996). The related strategic approaches for in-service teacher education include: programmes which are demand driven, responding to identified needs; programmes which focus on need and are based in schools or at resource centres; cost-effective programmes which enable large numbers of teachers to have opportunities for learning; and programmes which include not only studies on subject contents but also methodologies, use of materials, and management approaches in classrooms.

SPRINT was launched in 2000 by the MoE as a framework for lifelong learning for teachers in both basic and high schools. It involves: a teachers' group meeting, a headteachers' in-service meeting, a grade meeting at a resource centre, a subject meeting at a resource centre, and school in-service and monitoring. The programme has, however, proved weak, especially in the context of high school (Mubanga, 2012).

It is also important to note that, in addition to INSET programmes for teachers, the Ministry has introduced Education Leadership and Management training programme to strengthen effective school management. In fact, in relation to Zambia's intention to enhance the quality of education, the leadership role of head teachers cannot be more emphasized, as it can improve teacher attendance and performance, influence student behaviour, and relationships with stakeholders, including parents. How head teachers are selected, prepared, and supervised will determine the effectiveness of their leadership practices.

Teacher management and deployment

The acute and persistent teacher shortage suggests a need for improved teacher management, particularly through sound planning and regulation of teacher training, effective annual monitoring of attrition, and adjustment of entry requirements in teaching to meet projected needs. While MoGE oversees teacher training colleges, it cannot regulate teacher supply, since intake to each college and subject is determined by historical patterns, rather than in response to projected teacher requirements (Mulkeen, 2010).

Zambia uses a location-specific recruitment and planned deployment system, allowing teachers some choice of location. The recruitment system appears transparent as, each year, the available posts are advertized nationally in newspapers and on radio and television, with an indication of the number of posts available in each district. Candidates are allowed to apply directly to the district in which they

wish to work, but not to the specific school. This recruitment/deployment approach allowed Zambia to fill most of its available posts, while ensuring a high level of local recruitment of teachers. However, it resulted in an uneven distribution of the best-qualified teachers.

There are a number of challenges to teacher deployment, including a reluctance to work in hardship areas, insufficient housing provision, the medical requirements of teachers with health issues, and some communities' aversion to unmarried female teachers. Teachers' reluctance to work in hardship areas has resulted in wide variation in pupil-teacher ratios in rural districts. For example, pupil-teacher ratios in the 115 government schools of the Chibombo district ranged between 22:1 and 210:1. Some districts use innovative schemes to attract and retain teachers. The Gwembe district, for example, offers a loan to female teachers in the most rural schools to purchase solar panels (Mulkeen, 2010).

The absence of suitable housing appears to be a major barrier to teacher transfer to rural areas. It has been reported that housing is provided for some, but not all, teachers. According to Mulkeen (2010), housing provision is sufficient for only one-quarter or less of teachers, and even this was often 'temporary' housing, sometimes in poor condition.

Medical conditions are taken into account when deploying teachers, particularly those affected by HIV/AIDS. The deployment system allows teachers who are ill to be transferred to a school close to a health clinic if they are not near one already. Teachers already located near medical facilities can also avoid redeployment to more remote locations. Many sick teachers are referred to the University Teaching Hospital in Lusaka and this area has seen a number of transfers as a result. However, the most seriously ill teachers are nursed at home.

Deployment of female teachers is particularly challenging in some African countries, including Gambia, Malawi, and Zambia. In Zambia, some rural communities are reluctant to accept unmarried young female teachers, citing a variety of reasons, including religious and cultural ones.

Policies allowing female teachers to transfer close to where their husbands work have resulted in the migration of female teachers to urban areas, as they are often married to other educated professionals employed in urban locations. This robs rural areas of female teachers, who might otherwise serve as role models for girls' education.

Teacher attrition

While the Zambian Government is striving to improve the supply of trained teachers, its efforts are undermined by a very high teacher attrition rate. Out of the 93,200 teachers registered in 2013, 8,800 (9.4 per cent) left their positions in that year; a significant increase on the 6,400 who left in 2012. The main reasons for the high rate of attrition include retirement, upward movement into administrative positions, contract expiration, death, dismissal, illness, and so on. It is striking that the highest number (4,036) of leavers in the 2013 statistical bulletin indicated 'other' when asked to highlight their reason for leaving, suggesting a need for further research.

In general, considering the outputs of teacher colleges and universities, it seems that more teachers are leaving the profession than are joining it. However, some urban schools experience 'excess' teachers due to classroom shortages. Deploying teachers from these overstaffed schools is a big challenge, though most of 'excess' teachers have been reassigned to community schools while maintaining their previous payroll status. Female teachers are concentrated in urban areas (70 per cent), due to requests for transfer from rural areas. This means that the take-up of teachers' maternity leave is much more significant in urban schools (Zambia EFA 2015 Review, 2014). Also, in general, teachers prefer to teach in urban areas where living conditions are better than in rural areas. Low teacher salary is perceived as an attrition factor, especially given the improvement of the economic climate, which has meant increased job opportunities for educated people (Beyani, 2013).

Remuneration, incentives, and motivation

Although the remuneration package for MoGE staff includes housing and pension contributions, the general opinion is that the civil service is underpaid in Zambia, especially at the lower ranks. The starting annual pay for a qualified primary teacher in Zambia was USD3,292 in 2010, which allows a modest standard of living, though it represents only two-thirds of the cost of meeting the basic needs of a family of six people (Mulkeen, 2010).

The general perception is that teachers' salaries are low and the payroll inefficiently managed, causing delays in payment of salaries. Low pay, combined with a shortage of teaching materials, especially in rural schools, explains why many teachers have a preference for teaching in towns where living conditions are more favourable than those found in rural areas.

Financial incentives are used to encourage teachers to work in rural schools and those in disadvantaged urban areas where working conditions are difficult. Teachers in rural schools are paid an incentive of 20 per cent of their basic salary, while those practising double shifts in crowded urban schools receive the same level of allowance

(20 per cent of the salary). The ministry has envisaged the introduction of a two-tier system, with an additional allowance for teachers working in the least accessible rural schools. A basket of indicators, such as distance from a main road, post office, bank, or clinic, would be used to select eligible schools.

2.3 Equity

Since the publication of the policy document *Focus on Learning* (1992), which emphasised the need for resource mobilisation to develop schools, the Government of Zambia has expressed a commitment to its principles and to observing the spirit of equity in its education policies. Through *Educating Our Future* (1996), the Ministry of Education upholds the principle that every individual has an equal right to educational opportunities. This means that every individual child, regardless of personal circumstances or capacity, has a right of access to, and participation in, the education system.

The Government, through MoGE, has developed an equity strategy that advocates and promotes fairness and inclusion by creating conditions that equalize learning opportunities and access to education for everyone. To this end, the NIF's approach ensures consistency between policies aimed at improving equity and the actions and initiatives undertaken to achieve this objective. This approach, which seeks to be both inclusive and adapted to Zambians' needs, ensures that equity issues, such as those concerning gender, orphans and vulnerable children, community schools, adult literacy, special educational needs, HIV/AIDS, and school health and nutrition, are well supported. In considering the scope of its engagement for equity, Zambia has translated its vision into various national practices and programmes.

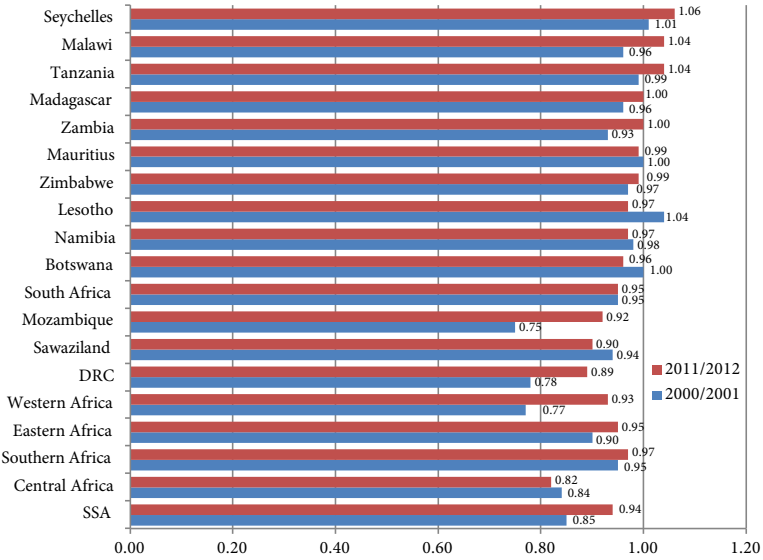
Gender disparities

Zambia's political commitment to ensuring gender parity in education is reflected in a number of measures and actions, such as the Programme for the Advancement of Girls' Education (PAGE) in the mid-1990s, the fifty-fifty enrolment policy at Grade 1, the free primary education policy, bursary support, and the re-entry policy for pupils seeking to take leave from school on becoming pregnant. In addition to legislation put in place to ensure that girls and other vulnerable children are enrolled and remain in school, there is a requirement that every policy, strategy, and programme on education should have a specific component addressing the needs of girls and marginalized children.

These efforts enabled Zambia, in 2012, to achieve a gender parity index (GPI) of 1.00 for primary education. It was found that the same proportion of girls and boys

enter the school system, but there remains a challenge in retaining girls in school, particularly in the rural areas where GPI stood at 0.96, compared to 1.05 in urban areas. Zambia's GPI of 1.00 is among the highest in the comparison group (*Figure 14*).

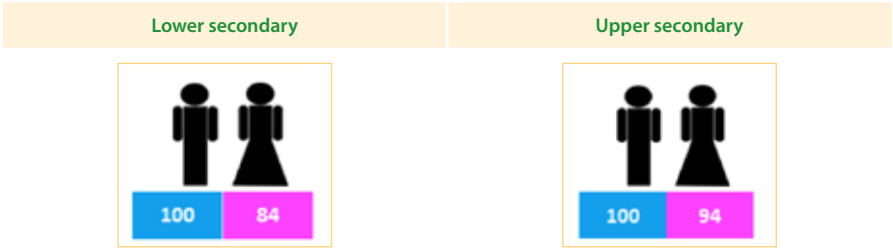
Figure 14 Trends in gender parity index in primary education, 2000-2012



Source: UNESCO/Pôle de Dakar.

Available data show that while opportunities for boys and girls to enter the school system are equal, girls are more likely to drop out, most notably by the fifth grade. This explains the low level of the national GPI for lower secondary education, estimated at 0.84 in 2012 (see *Figure 15*). This breaks down as 0.75 for rural areas and 1.00 for urban areas. The GPI for upper secondary, in contrast, stands at 0.94 (*Figure 15*).

Figure 15 Gender parity index in secondary education



According to Campaign for Female Education (Camfed, 2015), Zambia's girls experience high rates of exclusion from education because of the extreme poverty, most prevalent in the rural areas of Western, Luapula, and Northern provinces. These provinces fare much worse than others in government assessments of income levels, education, and health. Girls are far more likely to drop out of school, with the biggest disparities measured in rural communities, where 27 per cent of females have no education compared to 18 per cent of males. Pregnancy, unsafe learning environments, long distances to school, early marriage, and poverty are intrinsically linked and are the main challenges Zambian girls face in staying in school, particularly in rural areas.

Teenage pregnancy has been a big concern in relation to girls' participation in school over the past decade. For the five past years, over 15,000 pregnancies have been reported annually by MoGE, with 80 per cent of those pregnancies occurring in rural areas. This situation not only affects girls' participation in school, but also endangers their lives, as some do not survive the complications of birth, or, indeed, of unsafe abortions. They also run a risk of contracting sexually transmitted diseases, particularly HIV. Their children face a challenge to survive and most grow up to continue the cycle of poverty. According to MoGE, Zambia has one of the highest maternal mortality rates in Africa, a figure closely linked to the high rate of maternal mortality within the school-age group (Zambia EFA 2015 Review, 2014).

Despite a slight decline in fertility rate among 15–19-year-old adolescents, from 134 births per 1,000 women in 2009 to 122 births per 1,000 women in 2013 (World Bank, 2015), Zambia's fertility rate is still well above the sub-Saharan African average of 106 births per 1,000 women. Teenage pregnancies exacerbate gender equity issues that are still to be fully addressed.

MoGE also faces multiple challenges in addressing social and cultural norms that affect the educational attainment of both boys and girls. As a result of some of these social and cultural norms, teenagers who have fathered children are often valued in

the community, which may contribute to the phenomenon of early pregnancy and lead to school dropout; an issue compounded, according to MESVTEE (2010), by low re-admission rates. Such norms have a much greater impact in rural areas.

The Zambian Government is striving to address these challenges, including through the construction of schools with safe boarding facilities and the creation of safe learning environments, as well as through the promotion of reproductive education to inform girls of the risks of early sexual activity.

Orphans and vulnerable children disparities

An estimated 1.4 million children are orphaned in Zambia, having lost one or both parents (UNICEF, 2013), and hundreds more are vulnerable due to the effects of illness and poverty. According to the 2013-14 DHS, the proportion of Zambian children under age 18 with one or both parents dead is 11 per cent. Orphanhood increases with children's age, from 2 per cent of children under age 2 to 24 per cent of children aged 15-17. The proportion of orphans is higher in urban areas (13 per cent) than rural areas (10 per cent). In past decades, the impact of the HIV pandemic has contributed significantly to the increase in the number of orphans and other vulnerable children. In 2012, 670,000 children were considered orphaned by HIV and AIDS in Zambia, corresponding to 48 per cent of the total number of orphaned children in the country. These children, like other vulnerable and orphaned children, experience stigma and discrimination, often leading to negative outcomes in terms of child development, social integration, health, and education.

Thousands of children are also considered vulnerable due to the effects of poverty, orphanhood and illness. These children are at high risk of school dropout (*Table 6*), often leaving the education system to earn a salary or help the family with household duties (CSO Zambia et al., 2015). Without education, they miss out on the opportunity to acquire key learning skills and are likely to end up perpetuating inter-generational cycles of low economic status.

Table 6 Percentage of 10–14-year-old children attending school by survivorship of parents

	Sex		Area of residence		Total
	Male	Female	Urban	Rural	
Both parents deceased	78.7%	78.3%	86.2%	72.6%	78.5%
Both parents alive and living with at least one parent	90.5%	91.5%	95.0%	89.1%	91.0%

Source: CSO Zambia, 2015.

For orphans and vulnerable children (OVCs), bursary support is often required to access school and pursue education to a higher level. MoGE has borne this in mind in designing its policies, strategies, and programmes (Zambia EFA 2015 Review, 2014). Financial support and the abolition of the fee to access Grade 7 national examinations are two MoGE interventions which support vulnerable children. Additional financial support for OVCs is provided by a number of stakeholders, including FAWEZA, Camfed, CHANGES22, international organizations and agencies, and community based organizations. However, given the increasing number of OVCs across the country and the growing proportion accessing school, the level of bursary support is insufficient to cater for all children who need it (Zambia EFA 2015 Review, 2014).

Since 2000, more than 600,000 new school places have been created in 2,758 community schools to strengthen equity and access to education for all (Zambia EFA 2015 Review, 2014). In total, more than 3,000 communities in Zambia participated in the implementation of these community schools. The communities not only initiated the schools, but run them on a daily basis. Even though community schools face major challenges, such as a lack of qualified teachers and a lack of resources (material and human), they account for approximatively 20 per cent of total enrolment in basic schools in Zambia. According to the Zambia EFA 2015 Review (2014), community schools have only provided interim relief, because they do not offer optimal conditions for learning, and lack both necessary resources and adequate professional development. Support is needed to ensure community schools do not become part of the problem, but remain part of the solution.

Poverty, low levels of human development, and adult illiteracy are factors that adversely affect both quality and equality of access to education. Levels of adult illiteracy are more acute in rural areas and are particularly prevalent among females. It becomes increasingly difficult for illiterate parents to support their children in school activities as their children develop more competencies and more in-depth knowledge over the years. The focus on adult literacy is, therefore, both important and necessary for the equity and overall development of education in Zambia.

Out-of-school children

The impacts of these inequities are also reflected in the number of primary and lower secondary school-age children who are out of school. Despite the significant variations from year to year in the number of primary-age out-of-school children (see *Table 7*), data provided by UIS (2015) indicate that, in 2013, more than 195,000 primary-age children were out of school in Zambia. The data presented in *Figure 16* show that the percentage of adolescents out of school is higher than that of out-of-school children of primary school age (CSO Zambia et al., 2009). More importantly,

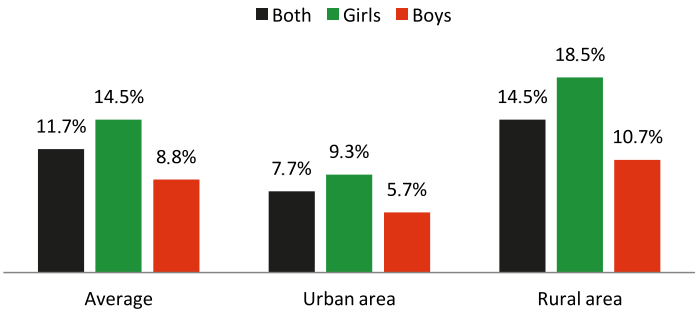
it indicates that the trend is higher among girls and that it is especially acute for girls living in rural areas.

Table 7 Percentage of Zambian out-of-school children: Primary (ages 7-13)

	Out-of-school girls (%) (UIS, 2015)	Out-of-school boys (%) (UIS, 2015)	Total of out-of-school children (%) *(UIS, 2015)*	Number of out-of-school children *(World Bank, 2015)*
2009	*7.2%	*8.4%	*7.8%	196,177
2010	*9.2%	*11.0%	*10.4%	271,516
2011	5.9%	6.8%	6.4%	170,939
2012	*3.7%	*5.4%	*4.5%	124,814
2013	6.5%	7.2%	6.9%	195,582

Source: UIS, 2015, and World Bank, 2015.
* UIS estimation

Figure 16 Percentage of Zambian out-of-school adolescents in 2007: secondary (ages 14-18)



Source: CSO Zambia et al., 2007.

Data from demographic and health surveys (DHS) show that higher proportions of out-of-school children were found not only among rural girls, but also among school-age children and young people from the poorest families (*Figure 17* and *Figure 18*). These results, therefore, reinforce the point that Zambia needs to continue efforts to strengthen access to education for all, particularly by addressing equity issues.

Figure 17 Percentage of primary school-age children (ages 7-13) out of school

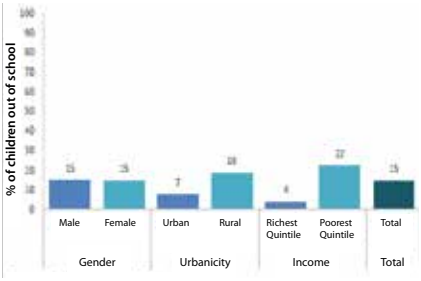
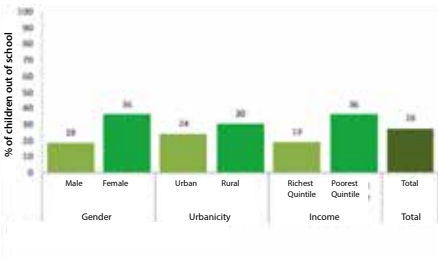


Figure 18 Percentage of secondary school children (ages 14-18) out of school



Source: EPDC

MoGE equity interventions

A commitment to equity means working to ensure that all children, including girls, children of diverse racial, ethnic, social, and economic backgrounds, children with HIV/AIDS, and children with disabilities have access to school and to quality education. The Special Needs/Inclusive Education Unit (SNIEU) is responsible for formulating policies and monitoring progress related to increasing access to education for learners with special educational needs (SEN), as well as for facilitating the procurement and development of special needs materials. It is also the official entity in charge of the implementation and evaluation of the Inclusive Schooling Programme (INSPRO). INSPRO aims to improve the quality of primary, secondary, and tertiary education for SEN learners, to increase their access to education, and to develop an assessment protocol for early identification of SEN. In terms of results, MESVTEE (2013*a*) points out that the SNIEU has developed specialized materials such as documents transcribed into Braille, screening and assessment tools, and specialized training modules. Curriculum reform has taken place at both general and tertiary levels, and special education courses were introduced to the curriculum in colleges and universities. Infrastructure has also improved in recent years, through the construction of the National Centre of Excellence for Learners with Special Educational Needs and the expansion of the Zambia Institute of Special Education (ZAMISE). INSPRO has been introduced in all the provinces and has provided more than 220,000 SEN learners with access to education (MESVTEE Statistical Bulletin, 2010). In addition to INSPRO, other programmes promoting inclusive education in Zambia are implemented by organizations such as Sightsavers Zambia, Child Fund, Leornard Cheshire, and DEAR Project.

Despite the efforts of the SNIEU, some negative attitudes towards inclusive education, and, in particular, to education for disabled people, continue to present a barrier, mainly in rural areas. Some teachers have been empowered to make inclusive education a reality in their classrooms. However, many have not received any specific training on inclusive approaches or on inclusive education in general (IDDC, 2013).

Multi-sectoral interventions for inclusive education

The HIV/AIDS pandemic affects a considerable number of Zambians. For instance, approximatively 120,000 children (aged 0–14) were living with HIV in 2009 (UNAIDS, 2010). According to CSO et al. (2015), 6.6 per cent of the population aged between 15 and 24 years (male: 5.4 per cent; female: 7.7 per cent) and 13.3 per cent of 15–49 population were affected by HIV/AIDS in 2014. HIV/AIDS is responsible for the deaths of hundreds of people, including teachers, every year. However, according to the Zambia EFA 2015 Review (2014), the number of casualties among teachers has been minimised, in the past few years, by improved access to medication and to some relevant technologies and treatments. Despite the slight decrease in numbers of affected people in recent years (CSO et al., 2015), MoGE needs to improve the level of knowledge and awareness of HIV/AIDS and should continue to coordinate efforts with key local, national, and international stakeholders in HIV/AIDS prevention and treatment.

Finally, the positive experiences of the World Health Organization (WHO), UNICEF, and the United Nations World Food Programme (WFP) suggest that education and health workers, teachers, parents, and community members should work together to implement effective school health and nutrition (SHN) programmes to improve the health of learners so that they can effectively participate in learning activities. MoGE, in partnership with other stakeholders, is implementing SHN programmes to ensure healthy and well-nourished learners in the country. The national programme has four major components: school-based health services, water sanitation and the environment, skills-based health education, and school health policies. According to MESVTEE (2010), of a total of 8,783 schools, '44 per cent [were] offering school health and nutrition interventions through treatment for worms and bilharzia, malaria control, water and sanitation, school feeding programme, school gardens and skills-based health education' (p. 50). However, Chikwanu (2015) argues that the SHN policy was poorly implemented in schools. Recent data (UNICEF, 2015) show that, in 2012, some 63 per cent of the population of Zambia were making use of improved drinking water. However, they also reveal significant disparities in access to and use of improved drinking water between urban (85 per cent) and rural (49 per cent) areas. In addition, despite the efforts of the SHN programme, in 2013,

14.9 per cent of children under 5 were underweight, 45.8 per cent suffered from stunting, and 5.6 per cent from wasting, while results for the 2008–2012 period were slightly more encouraging with, respectively, 14.6 per cent, 45.4 per cent, and 5.2 per cent. However, there is some evidence of the positive impact of awareness-raising programmes such as SHN in the context of the prevention and treatment of malaria. In 2013, 37 per cent of children with fever were receiving anti-malarial treatment, 57 per cent of children were sleeping under insecticide-treated bed nets (ITNs), and 68 per cent of households had at least one ITN, compared to 34 per cent, 50 per cent, and 64 per cent, respectively, for the 2008–2012 period.

Nevertheless, the data overall echo Chikwanu's observation and highlight a pronounced need for further development of SHN as well as for further implementation across the country.

2.4 Effectiveness

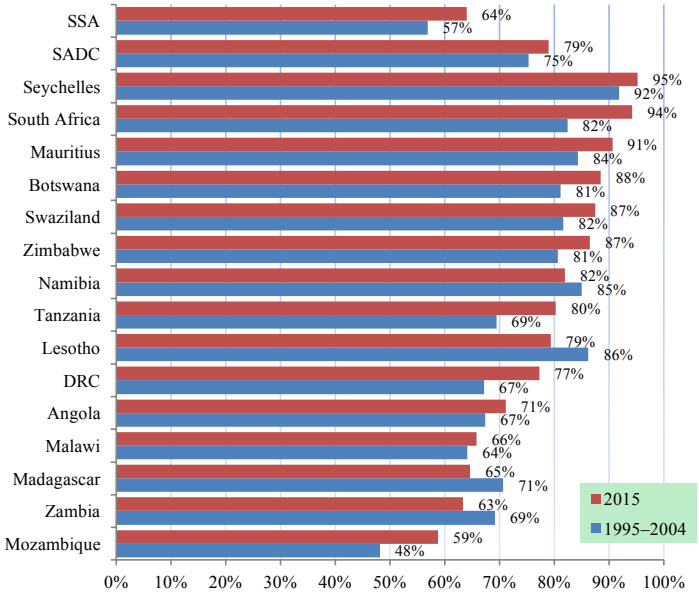
Several measures can be used to assess how effective an education system is compared to other countries. Typical points of comparison include literacy rates, school expectancy (the duration of students' school attendance), graduation rates, and measures of student performance in internationally and/or regionally administered tests such as PISA and SACMEQ. Together, these different measures provide a snapshot of how well or how poorly an education system is performing.

Literacy rates

In terms of progress made towards the elimination of illiteracy, government efforts have yielded some results, although the EFA target for 2015 has not been achieved. According to UNESCO EFA Global Monitoring Report (2015), the adult literacy rate (15 years and older) decreased from 69 per cent in 1995-2004 to 63 per cent in 2015.[7] These figures have to be compared with the sub-Saharan African average adult literacy rate of 64 per cent (*Figure 19*) and the SADC sub-region average rate of 79 per cent.

7 According to Zambia EFA 2015 Review, the adult literacy rate increased from 67.2% in 2000 to 83% in 2010.

Figure 19 Adult literacy rate (15 years and above)



Source: EFA Global Monitoring report, 2015.

Table 8 shows Zambia's achievements with regard to EFA Goal 4: 'Achieving a 50 per cent improvement in levels of adult literacy by 2015'.

Table 8 Zambia's performance: Achieving a 50 per cent improvement in levels of adult literacy, 2005–2014

	Indicator reported	Baseline (2004)	Target (2015)	Results (2014)
Goal 4: Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults	Illiteracy rates for those aged 15 and above	3.2 million illiterate (32.8% of the adult population)	16.4% adult illiteracy rate or 2.3 million adults	13.07% illiteracy rate or 1.9 million adults
	Completion rate in adult literacy and basic continuing education programmes	High dropout rates	100% completion rates	Going by the achievements in the previous indicator, this target was generally met

Source: Zambia EFA 2015 Review, 2014.

Turning to educational attainment, the distribution of population (15-59 years) according to the highest education level completed shows that 3.8 per cent had no education; 23.1 per cent had some primary education; 17.2 per cent completed primary level; 34.7 per cent had some secondary education; 13.2 per cent completed secondary level; and 8 per cent had more than secondary education in 2013-14 (CSO, 2014).

School-life expectancy

The average school life expectancy (the total number of years of education a child can expect to receive) is 10.8 years in Zambia, which is just near two years above the basic education level. While the Zambia's school life expectancy is higher than the average of the sub-Saharan African region (9.5 years), it stands slightly below the SADC's average (11.2 years). *Figure 20* illustrates school life expectancy within the comparator group.

Figure 20 School life expectancy (years)

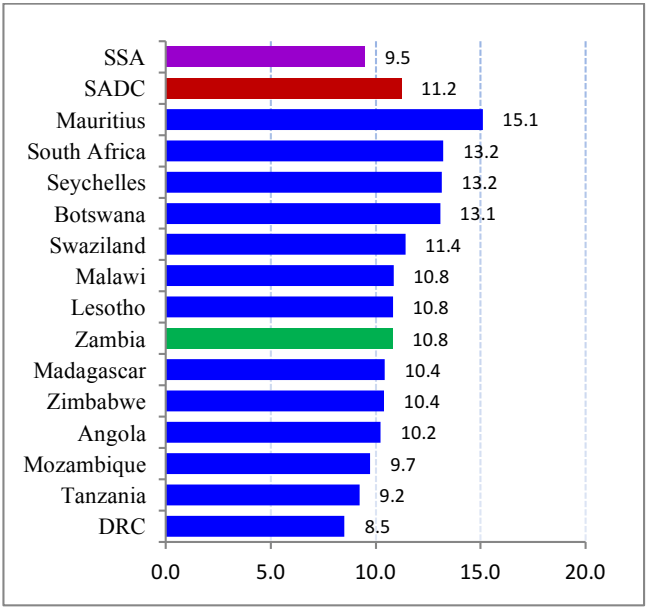


Table 9 School life expectancy by sex

	Total	Male	Female
DRC	8.5	9.7	7.3
Tanzania	9.2	9.4	9.1
Mozambique	9.7	10.3	9.1
Angola	10.2	11.5	9.0
Zimbabwe	10.4	–	–
Madagascar	10.4	10.7	10.2
Zambia	**10.8**	–	–
Lesotho	10.8	–	–
Malawi	10.8	10.8	10.9
Swaziland	11.4	11.8	10.9
Botswana	13.1	–	–
Seychelles	13.2	12.7	13.6
South Africa	13.2	–	–
Mauritius	15.1	–	–
SADC	11.2	–	–
SSA	9.5	9.9	8.7

Source: UIS, GMR 2015. Zambia's indicators are calculated using data from the statistical bulletin 2014.

It should be noted, however, that school life expectancy represents the expected number of years of schooling that will be completed, including years spent repeating one or more grades. *Table 9* suggests that the percentage of repeaters in both primary and secondary education in Zambia is well below the average for sub-Saharan countries.

Table 10 Percentage of repeaters in primary and secondary education

Country/region	Primary education (%)	Secondary general education (%)
Malawi (2013/2012)	18.88	12.15
Madagascar (2013/2013)	22.07	11.43
DRC (2013/2013)	10.81	9.90
Mozambique (2013/2013)	6.88	14.53
Zimbabwe	NA	NA
Lesotho (2013/2013)	13.67	14.41
Tanzania (2013/2013)	3.50	4.83
Zambia (2013/2013)	5.53	6.88
Swaziland (2012/2012)	15.49	11.00
Namibia (2012/2012)	14.89	17.97
Angola (2011/2009)	10.30	18.60
South Africa	NA	NA
Botswana (2012/2012)	4.66	0.50
Mauritius (2013/2013)	1.62	11.48
Seychelles	NA	NA
Sub-Saharan Africa (2013/2013)	8.75	12.27

Source: UIS database, 2015.

Student performance

In terms of learning performance, most of the standardized national, regional, and international assessments highlight low learning achievement scores for a huge number of students in Zambian schools. Assessment initiatives conducted over the past decade include the Primary Reading Programme (PRP), Break Through to Literacy (BTL), Early Grade Reading Assessments (EGRA), Early Grade Mathematics Assessment (EGMA), the Grade Five National Assessment (G5NA), and successive public examinations, all of which suggest that children are drifting through the school system with very low mastery of desired learning competencies.

According to the 2006 and 2008 Zambia National Assessment Survey Reports on Learning Achievements at Middle Basic Level, performance in Zambian schools was consistently below the desirable minimum level of 40 per cent (whether in English, mathematics,[8] life skills, or Zambian Languages), while the desired level is 70 per cent (ZANEC, 2012). Reading assessments for early grades consistently show that over 80 per cent of children are unable to read and write at the end of their first year of learning. The 2012 G5NA also indicated that pupils consistently score below the 40th per centile, the minimum performance standard established by the MoGE.

This weak performance is also depicted in the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) results. Regionally, SACMEQ results show that Zambian learners are performing at levels far below those of their regional counterparts. For example, on SACMEQ's 2007 examination, Zambia's learners scored an average of 434 in reading and 435 in mathematics, well below the international mean of 500. Zambia is ranked 13th out of 14 countries for literacy and numeracy by SACMEQ.

The Zambia EFA 2015 Review (2014) cited the low quality and relevance of education as barriers to access and participation, especially for children from poor households. The school opportunity cost is prohibitive when children confront poor learning experiences, progressing without essential competencies such as the ability to read and write. While compelling educational experiences create positive incentives for children and families to choose education over other competing activities, poor learning experiences exacerbate school opportunity cost, lead to early dropout, and leave some learners subject to the vagaries of social norms, such as early marriage, child labour, etc. This negative experience explains why girls, especially in rural areas, leave the school system during upper primary; mostly because they and their families question the relevance of education to their immediate livelihood needs (Zambia EFA 2015 Review, 2014).

In the quest to address quality issues in Zambia, the debate is moving beyond traditional remedies such as reducing the pupil-teacher ratio or providing school requisites (chalk, desk, textbooks, etc.) to explore 'soft' solutions such as improving governance, promoting effective school leadership and management, and introducing formative assessment to enhance teaching and learning. The Zambian authorities have already included these issues in their critical post-2015 education agenda.

8 In 2008, the score in mathematics was 40.2 per cent.

2.5 Efficiency

The efficiency of an education system is a measure of its performance relative to the investment made. Efficiency speaks to how well or how poorly a system is able to utilize existing resources. To study efficiency, it is necessary to examine how the educational performance of a given country compares to the performance achieved by countries that have made similar investments or, alternatively, whether other systems have been able to obtain similar or better results by making smaller investments.

Public expenditure devoted to education

The education budget represents one of the largest component parts of the overall Zambian Government budget. The Government of Zambia has improved education funding since 2000, in response to increased demand for school. This is an indication of political commitment to achieving education goals and targets. Notwithstanding this effort, however, Zambia's share of GDP devoted to education (4.3 per cent) was lower than the average for the southern African region (4.9 per cent) and sub-Saharan Africa (4.5 per cent) in 2013. With 15.4 per cent of total public expenditure devoted to education (compared to an average 16.7 per cent in the SADC), Zambia still has some leeway to increase its long-term commitment to public financing for education.

To accommodate the increased enrolment of recent years, especially in general education, a significant proportion of the increase in the education budget has been devoted to school infrastructure and improving staff working conditions, including teachers' salaries. Thus, in reality, the amount available for teaching and learning resources and running schools remains low (Zambia EFA Review, 2015).

In 2014 and 2015, the education budget amounted to ZMW 8.6 billion (approximately US $1.23 billion) and ZMW 9.4 billion, representing, respectively, 20.1 per cent and 20.2 per cent of the total budget. While these budget shares represent 5 per cent of national GDP, it is important to note that the figures correspond to the budgeted amounts, not actual education expenditure. Actual expenditure is, in general, lower than the budget provisions. *Table 11* shows that, for the last five years, actual public expenditure on education represented an average of 17 per cent of total government expenditure and stood at 15.4 per cent in 2013.

Table 11 Trends in public expenditure on education 2006-2015 (nominal ZMW million)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Budget
Gross domestic product	38,561	46,195	54,839	64,616	77,667	93,333	106,015	120,780	166,078	189,783
Total government expenditure	7,729	9,799	12,349	13,873	17,252	22,996	26,179	33,790	42,682	46,667
Education expenditure (EE)	1,513	1,851	2,371	2,847	2,909	3,522	4,501	5,209	8,599	9,415
TGE as % of GDP	20.0	21.2	22.5	21.5	22.2	24.6	24.7	28.0	25.7	24.6
EE as % GDP	3.9	4.0	4.3	4.4	3.7	3.8	4.2	4.3	5.2	5.0
EE as % TGE	9.6	18.9	19.2	20.5	16.9	15.3	17.2	15.4	20.1	20.2

Source: World Bank, 2015.

MESVTEE's 2015 financial report provided a detailed analysis of education budget allocation, release, and execution for 2014. According to the report, out of a total ZMW 8.6 billion education budget, ZMW 6.1 billion (76 per cent) was allocated to personal emoluments (PEs), leaving ZMW 2.2 billion (24 per cent) for non-personal emoluments (non-PEs). The total allocation was mostly funded by Government resources, which accounted for 97 per cent, while the main cooperating partners (Irish Aid, UNICEF, JICA, AfDB, DFID, GPE, and USAID) contributed the remaining three per cent through sector budget support.

In parallel, some active donors provided funding through bilateral and multilateral arrangements using grants and projects in 2014. Irish Aid contributed £6 million, the Japan International Cooperation Agency (JICA) $3 million, and the UK Department for International Development (DFID) $23 million. The Global Partnership for Education (GPE) approved the Ministry's application for funding amounting to $35.2 million for 2013–2018, with DFID acting as supervising entity. Additionally, DFID and GPE, through the Sector Budget Support Programme, provided $1.6 million subject to achievement of a number of targets, referred to as disbursement-linked milestones (DLMs). Similarly, the Ministry received external funds from various civil society organizations, amounting to ZMW 254.6 million. However, it is important to note the sharp decline in cooperating partners' support, including project funding,

from approximately 18 per cent of the total sector expenditure in 2009 to less than 6 per cent in 2012, and only 3 per cent in 2014. *Table 12* shows the trend in education funding, including cooperating partners' contributions, from 2006 to 2014.

Table 12 Trends of education financing by cooperating partners (CP) (US$, millions)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
CP financing	58	84	67	102	33	45	49	12	37
Government financing	361	378	566	462	574	679	826	953	1,361
Total education expenditure	420	462	633	564	606	725	875	965	1,398
% CP financing	14%	18%	11%	18%	5%	6%	6%	1%	3%

Source: World Bank, 2015.

This decline in CPs' financing is partly due to the reduction in the number of active CPs in the sector. In fact, at the start of NIF II in 2008, 11 CP had signed a memorandum of understanding with the education sector, with five contributing to the pool fund, while at the start of NIF III in 2012, there were only six CP signatories to the Mutual Accountability Framework, with only two contributing to the pool. However, the current funding structure seems consistent with Zambia's status as a middle-income country and the provisions of the national education policy, which imply that the major responsibility for the education financing resides with the Zambian Government.

Recent trends in education financing indicate not only a constant commitment to education funding, but also a gradual shift in focus from basic education to secondary and tertiary education, reflecting the Government's intention to implement a national education strategy that is relevant to the current context of the country. Having made significant strides in terms of universal primary education and sustained economic development (gaining the status of a middle-income country), Zambia is moving into the post-EFA era, and its education strategy fits well with the internationally agreed Education 2030 agenda.

Despite these achievements, however, analysis of education financing in Zambia raises a number of issues, namely weak budget performance and inefficient intra-sectoral budget allocation and utilization. These issues are reviewed in-depth in the third chapter of this report, in the context of sector-wide policy and planning.

Performance relative to investment

As described in *Figure 21* and *Figure 22*, Zambia's expenditure on education is limited, though much higher than that of some countries in the region. Nevertheless, the results of SACMEQ III (*Figure 23*) show that these levels of expenditure have yet to be translated into improvements in student performance.

Figure 21 Public expenditure on education as % of GDP

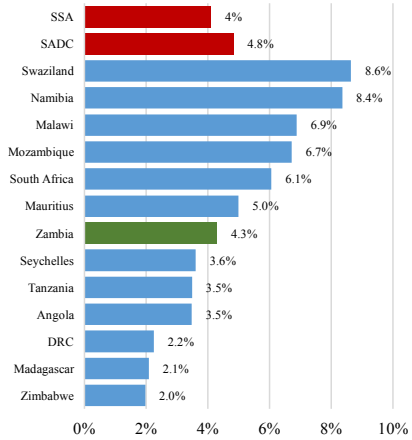
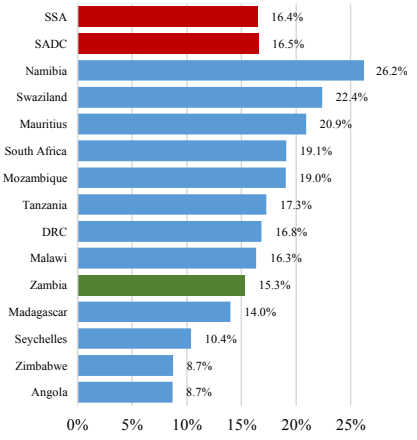


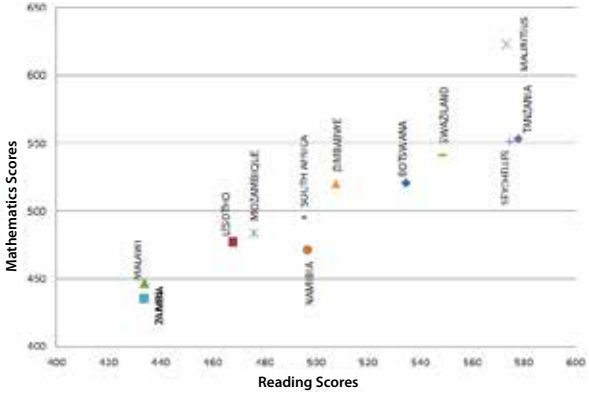
Figure 22 Public expenditure on education as % of total public expenditure



Source: UIS and GMR, 2015. Data for Zambia are from World Bank, 2015.

The Zambian education system underperforms in comparison to countries which invest less in education. Regionally, the results show that Zambian learners score the lowest in both reading and mathematics compared to their regional counterparts. When considered against expenditure levels, Zambia's education system performs less well than those of Zimbabwe, Seychelles, and Mauritius.

Figure 23 National performance on reading and mathematics assessments (SACMEQ III)



Source: Hungi et al., 2010.

2.6 Overall appraisal

Overall assessment of the Zambian education system shows significant achievements in relation to *access*, a mixed picture in terms of *quality and relevance*, *equity,* and *effectiveness*, and raises questions in terms of *efficiency*.

Turning first to *access*, Zambia presents good participation rates in primary and lower secondary education. These rates reflect an expansion in access, bringing the country closer to its goal of providing universal education. Participation rates in upper secondary education, however, remain low, indicating that Zambia is having difficulty preventing children from dropping out before (or after) completing lower secondary. Additionally, participation in tertiary education appears to accommodate only a relatively small number of students, with one of the lowest rates in sub-Saharan countries.

It is important to note that, in spite of real improvements in access to basic education, Zambia still faces many challenges, including the further expansion of secondary education to accommodate graduates from primary education, improving teaching conditions to enhance the quality of learning, and reducing dropout, especially among girls. The net intake rate (NIR) for primary education, which stood at 56.9 per cent in 2014, is far from the EFA target of 100 per cent that was expected by 2015 (Zambia EFA 2015 Review, 2014). Long distances to school for younger children in rural areas and a scarcity of Grade 1 places in urban areas (especially in Lusaka district) still constitute key obstacles to school admission for children at official entrance age.

With regard to *quality and relevance*, which this report assesses in relation to the conditions that shape teaching and learning in the classroom, including teaching and learning conditions, teachers' qualifications, and teacher education and supply, the picture shows some improvement, though many challenges remain. Among the barriers to overcome, high teacher-pupil ratios, limited instructional hours, and a shortage of qualified teachers continue to undermine the quality of education.

In terms of *equity*, proactive measures to attain gender parity have resulted in the same proportion of girls and boys being enrolled in primary education and a relatively high gender parity index, among the highest in the region, for both lower and upper secondary education. Despite this success, Zambia still presents strong geographical disparities. These disparities are even more alarming in relation to the high number of OVCs and the high proportion of children out of school.

When it comes to *effectiveness*, the report examines the performance of the Zambian system in terms of literacy rate, school life expectancy, the percentage of repeaters, and student performance. The overall picture indicates that the system has been able to slightly raise its adult literacy rate, remaining above the average for sub-Saharan countries but well below the SADC sub-region average. Zambia's school life expectancy from primary to tertiary education places the country in the median position in the SADC sub-region, and slightly above the sub-Saharan African average. However, when the system's effectiveness is assessed against student performance in reading and mathematics, national examinations, national large-scale assessments (G5NA and G9NA), and international large-scale assessments (SACMEQ), the results clearly show that Zambia not only performs below average in international and regional comparisons, but also fails to meet to its own national standards.

Despite improvements on some key political criteria, such as *access*, the Zambian education system underperforms in comparison with a number of countries that invest less in education. Regionally, results show that Zambian learners are less successful than their regional counterparts. This low performance raises questions concerning the *efficiency* of the Zambian education system. These include some fairly pointed questions about government funding policies and the capacity of the system, under current arrangements, to effectively implement policies towards achievement of the Education 2030 goals.

References

Beyani, C. 2013. *Zambia: Effective delivery of public education services*. A review by AfriMAP and the Open Society Initiative for Southern Africa. Open Society Foundation. March 2013. Retrieved from: http://www.osisa.org/sites/default/files/afrimap_zambia_education_main_report_web_5july.pdf.

Cambridge Assessment. 2015. *Delivering assessment and influencing thinking*. Cambridge International Examinations. Retrieved from: http://www.cambridgeassessment.org.uk/images/138459-cambridge-assessment-brochure.pdf.

Chanda. J. 2012. 'Assessments in the Zambian education system'. Paper given at the UIS Workshop on Measurement of Learning Outcomes, 7–8 May 2012, Dakar, Senegal. Retrieved from: http://www.uis.unesco.org/StatisticalCapacityBuilding/Workshop%20Documents/Education%20workshop%20dox/Dakar%202014/06_Zambia_EN.pdf.

Chikwanu, F. 2015. *Evaluation of the implementation of the School WASH Programme in Choma District of Zambia*. University of Zambia. Retrieved from: http://dspace.unza.zm:8080/xmlui/handle/123456789/3647.

Chusa, S. 2013. 'Zambia: Revised school curriculum unveiled'. *Times of Zambia*. Retrieved from: http://allafrica.com/stories/201302140635.html.

Chuunga, M. S. 2013. *Teachers' practices in the teaching of reading and writing towards supporting learners with reading difficulties at lower primary: A case study of teachers for fourth-graders in Monze District, Zambia*. University of Oslo, Norway. Retrieved from: https://www.duo.uio.no/bitstream/handle/10852/36638/SNEx4390xThesisxFinalxDraftx2.pdf?sequence=2.

CSO Zambia; Ministry of Health, Zambia; Tropical Diseases Research Centre; University of Zambia; Macro International Inc. 2009. *Zambia demographic and health survey 2007*. Calverton, Maryland, USA: CSO and Macro International Inc. Retrieved from: http://countryoffice.unfpa.org/zambia/drive/2007_zdhs_final_report.pdf.

CSO Zambia; Ministry of Health, Zambia; ICF International. 2015. *Zambia demographic and health survey 2013–14*. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health, and ICF International. Retrieved from: http://dhsprogram.com/pubs/pdf/FR304/FR304.pdf.

De Kemp, A.; Elbers, C.; Willem, J. 2008. *IOB impact evaluation: Primary education in Zambia*. Institute of Development Policy and Management, The Hague, Netherlands Ministry of Foreign Affairs.

ECZ (Examinations Council of Zambia). 2014. Examinations Council of Zambia. Retrieved from: http://www.exams-council.org.zm/.

EPDC (Education Policy Data Centre). 2014. *National education profile for Zambia: 2014 update*. Retrieved from: http://www.epdc.org/sites/default/files/documents/EPDC%20NEP_Zambia.pdf.

Ercikan, K.; Arim, R.; Oliveri, M.; Sandilands, D. 2008. *Evaluation of dimensions of the work of the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) and of its programme of cooperation with the International Institute for Educational Planning (IIEP)*. Paris: UNESCO.

Galabawa, J. C. J. 2014. 'Enhancing capacities for improving quality education assessment practices'. In: Z. Babaci-Wilhite (Ed.), Giving space to African voices: Rights in local languages and local curriculum (pp. 93–106).

Global Partnership for Education. 2011. *Appraisal of the Zambia NIF III 2011–2015 under the Sixth National Development Plan (SNDP)*. Retrieved from: http://www.globalpartnership.org/content/appraisal-zambia-nif-iii-2011-2015-under-sixth-national-development-plan.

Gordon, R. 2014. 'Language of education planning in Zambia'. In: *Linguistic Portfolios, 3*(1). Retrieved from: http://repository.stcloudstate.edu/stcloud_ling/vol3/iss1/6.

Government of Zambia. 1995. *Laws of the Republic of Zambia: Volume 10*. Revised Edition. Retrieved from: http://unpan1.un.org/intradoc/groups/public/documents/cafrad/unpan004899.pdf.

Government of Zambia. 1996. *Educating Our Future*. Lusaka: Ministry of Education. Retrieved from: http://planipolis.iiep.unesco.org/upload/Zambia/Zambiaeducatingourfuture.pdf.

Hungi, N.; Makuwa, D.; Ross, K.; Saito, M.; Dolata, S.; van Capelle, F.l Paviot, L.; Vellien, J. 2010. *SACMEQ III project results: Pupil achievement levels in reading and mathematics*. Paris: Southern and Eastern Africa Consortium for Monitoring Educational Quality.

IDDC (International Disability and Development Consortium). 2013. *Teachers for all: Inclusive teaching for children with disabilities*. Policy review. Retrieved from: http://www.eenet.org.uk/resources/docs/IDDC_Paper_Teachers_for_all.pdf.

IIEP-UNESCO. 2007. Southern and Eastern Africa Consortium for Monitoring Educational Quality. Paris: IIEP-UNSECO. Retrieved from: http://www.unesco.org/iiep/eng/networks/sacmeq/sacmeq.htm.

International Monetary Fund (IMF). 2016. World Economic Outlook Database. April 2016. Retrieved from: https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx.

Kapambwe, W. M. 2010. 'The implementation of school based continuous assessment (CA) in Zambia'. In: *Educational Research and Reviews, 5*(3), 99–107.

Kapambwe, W. M. 2011. Aspects of the Ministry of Education policy on assessment. Preparatory workshop on the use of continuous assessment results with the final examinations. Retrieved from: http://fr.slideshare.net/wmkapambwe/aspects-of-the-zambian-ministry-of-educations-policy-on-assessment.

Kaufman, R.; Herman, J. J. 1991. *Strategic planning in education*. Lancaster, PA: Technomic Publishing Company.

Mahshi, K. 2010. 'Moving towards quality education for all'. *UNESCO International Institute for Educational Planning Newsletter, 28*(3). Paris: UNESCO. Retrieved from: http://www.iiep.unesco.org/sites/default/files/nl_2010-3_en.pdf .

Makuwa, D. K. 2012. About SACMEQ. Retrieved from: http://microdata.worldbank.org/index.php/catalog/1244/download/22639.

MESVTEE. 2010. Education Sector National Implementation Framework III 2011–2015. Lusaka, Zambia. Retrieved from: http://planipolis.iiep.unesco.org/upload/Zambia/Zambia_Education_Sector_NIF_III_2011_2015_Final_Draft.pdf.

MESVTEE. 2013*a*. Special Education. Special Needs – Inclusive Education Unit. Retrieved from: http://www.moe.gov.zm/index.php/2012-11-30-06-27-57/tess/special-education.

MESVTEE. 2013*b*. Statement by the Honourable Minister Dr. Phiri on the 2013 grades 7, 9, and 12 examination results. Retrieved from: http://www.parliament.gov.zm/index.php?option=com_docman&task=doc_view&gid=1209.

MESVTEE. 2014. *Education for All 2015 national review report: Zambia*. Retrieved from: http://unesdoc.unesco.org/images/0023/002315/231573e.pdf.

Mubanga, R. M. 2012. 'School Program of In-service Training for the Term (SPRINT) program in Zambia: A case of collaboration towards self-reliant education development'. Paper presented at the Japan Education Forum IX.

Mulkeen, A. 2010. *Teachers in Anglophone Africa: Issues in teacher supply, training, and management*. Development Practices in Education. Washington, DC: The World Bank. Retrieved from: http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/Teachers_Anglophone_Africa.pdf .

Mukwena, R. M. 2001. 'Situating decentralization in Zambia in a political context'. In: *African Administrative Studies, 57*, 35–50.

Network of Experts in Social sciences of Education and Training (NESSE). 2015. Retrieved from: http://www.nesse.fr/nesse/activities/research-mapping/educational-governance.

OECD (Organisation for Economic Co-operation and Development). 2014. *PISA for development. Capacity needs analysis report: Zambia*. Paris: OECD.

RTI International. 2009. *Early grade reading assessment toolkit*. North Carolina: RTI International.

Serpell, R. 2014. 'Contextual responsiveness: An enduring challenge for educational assessment in Africa'. University of Zambia. Keynote address to 32nd Conference of the AEAA, 12 August 2014. Livingstone, Zambia.

Sikayile, A. 2011. 'Educational decentralization in Zambia: an analysis of policy and practice – A Study of Chongwe and Solwezi District Education Boards'. Master's thesis. University of Oslo, Norway.

Shadreck, N. 2013. 'Student Assessment in Zambia'. Paper given at the World Bank Symposium: Assessment for Global Learning, November 8, 2013. Washington, DC.

Spaull, N. 2012. *Zambia at a glance*. SACMEQ at a glance series: Research on socio-economic policy (RESEP). Retrieved from: http://resep.sun.ac.za/index.php/projects/.

Swallow, J. R.; Nielson, E. B.; Chakufyali, P. N. 2009. *USAID/Zambia Education Program Evaluation*. Retrieved from: http://pdf.usaid.gov/pdf_docs/PDACN449.pdf.

TEVETA (Technical Education, Vocational and Entrepreneurship Training Authority). 2012. TEVETA: Our Mandate. Retrieved from: http://www.teveta.org.zm/index.php/about-us/mandate.

UIS (UNESCO Institute for Statistics). 2014. *Zambia: National Assessment Survey*. Examinations Council of Zambia. Retrieved from: http://www.uis.unesco.org/nada/en/index.php/catalogue/112.

UNAIDS (Joint United Nations Programme on HIV/AIDS). 2010. *Report on the global AIDS epidemic*.

UNDP (United Nations Development Programme). 2012. Government of the Republic of Zambia/United Nations Development Programme (UNDP) Governance Programme (2011–2015). Retrieved from: http://www.zm.undp.org/content/dam/zambia/docs/legalframework/Zambia_2012-2015%20Governance%20Programme%20Document.pdf.

UNESCO. 2006. *National education sector development plan: A result-based planning handbook*. Education Policies and Strategies, 13. Paris: UNESCO Education Section.

UNESCO-IBE (UNESCO International Bureau of Education). 2010. *World data on education: Zambia*. 7th Edition, 2010/11. Retrieved from: http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Zambia.pdf.

UNESCO-UNEVOC (UNESCO International Centre for Technical and Vocational Education and Training). 2010. *World TVET database: Zambia*. Retrieved from: http://www.unevoc.unesco.org/wtdb/worldtvetdatabase_zmb_en.pdf

UNESCO; SADC (Southern African Development Community). 2013. *Assessment and review of technical and vocational education and training (TVET) in the Southern African Development Community region and of the development of a regional strategy for the revitalization of TVET*. UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0022/002256/225632e.pdf.

UNICEF (United Nations Children's Fund). 2013. Zambia statistics. Retrieved from: http://www.unicef.org/infobycountry/zambia_statistics.html.

UNICEF. 2015. *State of the world's children 2015: Country statistical information*. Retrieved from: http://www.unicef.org/infobycountry/zambia_statistics.html.

USAID (US Agency for International Development). 2002. *Review and analysis of Zambia's education sector*. Lusaka, Zambia.

World Bank. 2009. *Zambia: Student assessment*. SABER country report. Washington, DC: World Bank.

World Bank. 2015. World Bank Zambia Database 2015. Retrieved from: http://data.worldbank.org/country/zambia?display=graph.

ZANEC (Zambia National Education Coalition). 2012. An analysis of the performance of the Zambian education system. Prepared by George Hamusunga. March 2012.

Chapter 3
Review of Priority Policy Areas

This chapter provides a detailed review of the five education policy areas identified by the ministries in charge of education, as national priorities:

- System-wide policy and planning.
- Teacher policies and development.
- Technical education, vocational and entrepreneurship training (TEVET).
- Adult literacy and education.
- Monitoring and assessment of learning achievement.

Each section provides a short overview of the key features of the corresponding policy domain, and highlights a number of the policy issues at stake. For each policy issue, supporting evidence is provided and policy relevance is discussed in the light of international evidence and research, resulting in a set of recommendations. For each recommendation, a rationale is presented, along with a discussion of policy relevance and, whenever possible, some indication of relative priority and cost.

3.1 System-wide policy and planning

Introduction

Education policy and planning are fundamental in setting the vision and mission for the sector, assessing need in order to define sector priorities and objectives, developing and implementing action plans to achieve the desired results, and monitoring and evaluating the effectiveness of implementation and its contribution to the achievement of the planned objectives (Kaufman and Herman, 1991). The credibility of an education plan rests on a number of interrelated factors, including: the ownership and commitment of the government and other education stakeholders (cooperating partners, civil society organizations, communities, etc.), the quality of the sector analysis/diagnosis, including the EMIS on which the plan is founded, and the feasibility of proposed policy actions, taking into account available and projected resources/capacities (human, material, institutional, organizational, and financial).

As mentioned in *Chapter 1*, education sector policy, planning, and governance in Zambia have evolved with the political history of the country as well as through the imperative for social and economic development articulated in successive

policy documents. Through successive education policy reforms, Zambia has, since independence, established a tradition of strategic planning, with the national development plans providing the basis for education sector plans. Educational planning has, therefore, been articulated through successive national development plans, including the Poverty Reduction Strategy Paper (PRSP, 2002), the Transitional National Development Plan (TNDP, 2002-2005), the Fifth National Development Plan (FNDP, 2006-2010), and the Sixth National Development Plan (SNDP, 2011-2015/16). These have, in large part, been geared towards alleviating poverty, achieving sustained economic growth, and creating employment. Educational planning in Zambia is also strongly informed by international trends and commitments, such as the MDGs, the EFA goals and, currently, the Education 2030 agenda.

The Zambia's current development agenda, as articulated by the National Vision 2030, focuses on the realization of the revised SNDP and the achievement of the nation's long-term development vision of becoming a prosperous middle-income country by 2030. In this connection, the Education Sector NIF III (2011–2015) and the Education Sector Plan (ESP) 2016–2020 provide a framework to drive the education sector's contribution to the national development endeavour, as well as to internationally agreed education goals, such as EFA goals, MDGs, and the Sustainable Development Goals.

The revised SNDP is organized around the theme of 'people-centered economic growth and development, with a specific educational development objective to 'increase equitable access to quality education and skills training through efficient and cost-effective measures that enhance human capacity for sustainable national development'. To this end, NIF III's focus is on four policy priorities, namely: (i) free primary and secondary education; (ii) the expansion of tertiary and higher education; (iii) the development of TEVET and skill training; and (iv) access, equity, quality, relevance, efficiency, and skills development.

As a sector plan, NIF III seeks to guide the articulation of the broader objectives of the SDNP into clear activities in the fields of education, science, vocational training, and early childhood education. It is, in effect, the SDNP's operational tool at all levels of the education system, from ministry headquarters to provincial education officers, district education board secretaries, and learning institutions. NIF III also serves as an important tool for the monitoring and assessment of implementation performance, while providing a framework for tracking resource utilization.

Process-wise, Zambia's education authority strives to involve all relevant stakeholders in policy dialogue for participative planning, though some stakeholders, such as local communities, need to be empowered to contribute effectively to this process. An

appraisal of NIF III by the Local Education Group found that the last Zambia ESP was based on extensive consultation involving local, district, provincial, and national stakeholders. An independent appraisal by international consultants reported that the plan had secured strong political and stakeholder support, including support from the donor community and civil society (GPE, 2011). However, despite the policy statements on public-private partnerships, the private sector's involvement in the education is still limited. Like other education partners (cooperating partners and NGOs), the private sector could be more effectively engaged through consultations during the plan development process and participation in joint annual reviews (Beyani, 2013).

At the start of this review, MESVTEE was preparing the Education Strategic Plan 2016–2020, following the established participative approach and incorporating lessons from the implementation of the previous ESP (NIF III). Nevertheless, despite its technical and intellectual strengths, education planning and management in Zambia still exhibits some weaknesses, particularly in the areas of: (i) governance, particularly with regard to the implementation of educational decentralization policy; (ii) budget performance and intra-sectoral budget allocation and utilization; and; (iii) national capacities for effective sector policy development and implementation, including issues related to monitoring and evaluation.

Policy issue 1: Ineffective implementation of the policy to decentralize education

The weak implementation of decentralization policy impedes progress on education access and quality, especially in rural areas.

Evidence

Despite the efforts invested by Zambia's government to decentralize education, stakeholders at both national and local levels point to marginal progress in implementation and the low-level results achieved by the decentralization policy (Irish Aid, 2013). They attribute this to a number of factors, mostly related to administrative and financial challenges. A number of thorny issues, including the legal and fiscal decentralization frameworks, have remained unresolved in the move towards meaningful devolution (MoE, 2010). A study[9] by Sikayile (2011), involving two districts (Chongwe and Solwezi), revealed that while the decentralization process brought some positive changes, especially in relation to participation

9 Discussions with relevant stakeholders during the review mission suggested that most of the issues raised in this study are real and common to almost all the districts.

and transparency both at district and school levels, it is still far from reaching the anticipated results, due to administrative barriers, including weak institutional capacity, poor accountability mechanisms, and ineffective autonomy of boards. A number of participants in the study mentioned the failure of DEBs to deliver on their mandate and to tackle school issues, including delays in teacher recruitment, low learning achievement, and poor supply of educational materials. For instance, the World Bank (2015) argues not only that the DEBs' grants had proved insufficient to fully cover procurement of all textbooks needed by students, but also that the procurement capacity of DEBs had been weak.

These implementation issues occurred despite steps taken by the Government, when establishing the DEBs, to develop their capacities, mostly in the areas of planning and management, including in relation to staff and infrastructure (MoE, 2003).

Weak institutional capacity

The issues raised in relation to institutional capacity included poor organizational support and realignment and weak implementation capacity. Sikayile's study suggests that weak institutional capacity not only affected the implementation of decentralization policy by the DEBs, but frustrated actors at school and community levels, raising fear that decentralization could worsen inequalities, since not all communities would be able to mobilize local resources for education.

Insufficient organizational support

The theme of poor organizational support has been reflected in concerns regarding personnel capabilities and operational guidelines, as well as, to a lesser extent, issues related to coordination and information transfer. It is interesting to note that these concerns, manifest at district level, are well known at central or national level, as can be observed in the following statements, captured in Sikayile's study:

> A respondent (at national level) stated: '*We are not aloof to the organizational challenges facing district education boards countrywide. This is why we decided to put in place policy measures to address them but whether they are working or not is difficult to tell. There are still gaps in implementation … There are a number of factors but the most critical ones in my view are lack of skilled manpower, unclear policy guidelines, and poor coordination.*'

This was corroborated by a respondent from Chongwe District who explained:

> '*… there are still setbacks concerning the implementation of educational decentralization…. and government still has a lot to do when it comes to strengthening institutional capacity at the district level. There are ambiguities surrounding operational guidelines which affect decision-making and coordination of activities. If MoE does not effectively reorganize*

these boards by streamlining coordination and structural mechanisms, this whole idea of district education boards will end up a white elephant.'

Similarly, a respondent from Solwezi District said:

'This district is so large but unfortunately we are not well organized as a board which makes it difficult to plan and coordinate. Education is very important. Therefore, a policy such as decentralization ought to facilitate continued management and administrative support. Moreover, most of these people in our board have no experience of how things should be done. They are used to the old system where central government did everything. You don't just establish boards and expect that everything will be fine.'

Weak organizational realignment

With regard to organizational realignment, i.e. the creation of the necessary institutional capacity framework to support the effective functioning of the DEBs, most of the informants reported a weak administrative system and the absence of a strong legal framework. Even when noting improvements in terms of transparency and accountability in decision-making, the majority of stakeholders recognized that DEBs are not functioning as officially expected. This is reflected in the following statement by a member of Chongwe DEB:

'We have the administrative framework but it is weak… Besides, where is the legal framework to support implementation of the policy in districts? Though the intentions were good, you cannot establish boards like we have done in this country without strengthening the administrative framework. Remember also that no matter how well-articulated your policy objectives are, implementation can be hampered if there is no legal framework – this is one of the biggest problems we are experiencing. If education is a right, why not develop a stronger regulatory framework to facilitate its provision?'

Similarly, a respondent from Solwezi DEB argued:

'No-one can boast about transparency or administrative efficiency in our board… at least not in absolute terms. Many times, decisions are made haphazardly. Senior officials from Lusaka often flock here to ask us why this and that is not being done. If administrative procedures are laid down, they are not adhered to… Maybe if we brought on board sufficient funding that would be different. But in my view the challenge is beyond what we experience: it's a question of a regulatory framework which, if it exists at all, is not working.'

Weak organizational realignment was found to be rooted in the ways in which the duties and functions of board members are constituted in the Education Act of

Zambia. In fact, while the functions of the PEO are clearly outlined in relation to those of the DEB secretary, this is not the case for the education board chairperson, thus creating potential conflict in the performance of these responsibilities (Sikayile, 2011). Some stakeholders perceive the weakness of the regulatory framework to be in part due to the Government's deliberate and prudent approach to introducing education decentralization, as this national-level contributor noted:

> *'Yes, there is need to realign institutions at district level to promote efficiency but government is very cautious in its approach. Educational decentralization, as you know, is by stages which are a building process. Most of these districts and communities like Mufumbwe are highly poverty stricken. Therefore, it may not be beneficial to put in place a regulatory framework which completely supplants government's role in education provision. Though education is a right… Government is cautious about putting in place a strong legal framework as that may create stress on the system given limited resources.'*

While a cautious and incremental approach to change might be required to ensure a smooth transition to decentralization, it could also be said to suggest some reservations on behalf of the Government, in terms of its commitment and its ability to anticipate beforehand the challenges to effective implementation.

Weak implementation capacity

Among the institutional capacity issues identified in Sikayile's study, weak implementation capacity was highlighted by almost all members of the two DEBs which took part. More specifically, the biggest issues concerned insufficient funding and the lack of skilled personnel to address the new requirements in terms of planning, decision-making, monitoring and evaluation, and reporting. Despite the MoE's attempts to develop DEBs' capacities in planning, and financial and staff management, the implementation capacity at district level remains questionable. The root causes of this problem, according to participants in Sikayile's study, ranged from lack of political will on the part of the government, to poor leadership in the boards, and a lack of commitment from communities to meaningful participation in the provision of basic education.

While most of the stakeholders consulted during this review considered lack of funding to be the most critical obstacle to successful implementation of the decentralization policy in Zambia, it is important to note that this problem is exacerbated by a number of administrative issues.

Inadequate accountability mechanism

Accountability is seen as one of the major corollaries of the decentralization policy, since the transfer of decision-making authority to lower-level units must

be accompanied by increased answerability for results. The implementation of education decentralization in Zambia raised some issues regarding accountability, namely the inadequate sharing of responsibilities within and between the governance and management teams at district level, and the excessive administrative control by the MoE, which engender inefficiency in the use of resources (Sikayile, 2011).

Inadequate sharing of responsibility

With regard to shared responsibility, it was found that decentralization, through the creation of DEBs, had engendered a strong sense of collective action and ownership, underpinned by the value of local knowledge and answerability for results at district level. In the two districts studied, the DEBs were unanimously considered as a venue for collective responsibility through which decision-making can be influenced, particularly with regard to the construction of teacher houses and additional classrooms in order to improve school access and quality. This positive perception was shared by the majority of board members involved in the study, as reflected in the following comment from a member from Solwezi District:

> *'We know what is required of us all in this board. All schools in this district are ours but if we don't tackle their problems who will do it? It is not like before when somebody from Lusaka came and told you what to do. Since we know the problems our children face in these schools, we meet as a team to discuss ways of addressing them. This is why, when it comes to constructing classroom blocks and teachers' houses, for instance, we are all united as a board including parents who contribute upfront materials. The main challenge, however, is that we are still answerable to headquarters and our decisions are often questioned even though communities are expected to be judges of our works.'*

In spite of this apparent enthusiasm, some respondents expressed reservations as to the viability of collective action, citing lack of transparency, poor consultation, and established controls as limiting factors. A member from the Chongwe DEB said:

> *'One of the challenges in this board is lack of transparency and consultation when making decisions. Many are the times you are invited to participate in activities you never had a say on (…) It is the same problem affecting PTAs in basic schools. Parents are only involved when it is time to contribute upfront materials for constructing school buildings. You just get a feeling that you are being sidelined! You wonder why? So why should everybody be squarely answerable for things not presided over as a team?'*

The rationale for collective action and the consequent accountability are compromised by the low levels of involvement of some board members in the decision-making process. This can also be the case when board members realize they have no authority to undertake agreed activities, as a respondent from Solwezi DEB argued:

'Even if we are represented on the board as PTA members, there is not so much to show for it at our level. Participation in board meetings is one thing but seeing to it that necessary resources are in place to undertake agreed activities is another. Some of these board members are just there for allowances in the name of working together, not that they are doing anything meaningful. Of course there may be minutes showing that they share ideas but then what else? If you look at the reports and statistics you will notice poor pupil performance and stagnating quality of education. If government is always to blame, then why are these boards there in the first place? Personally, I don't understand why it is like that, maybe you people who are so educated have answers.'

The intense political pressure under which the DEB secretary and the PEO operate may also undermine collective action, and subsequently the board's accountability to the primary beneficiaries of basic education (pupils, teachers, and parents).

Excessive administrative control from the centre

The persistence of administrative control has also been raised as an obstacle to the successful functioning of the decentralization compact. Through educational decentralization, the DEBs are granted administrative, legal, and financial decision-making powers over education matters (MoE, 1996). This implies increased local control through deregulation of government duties. A senior policymaker at the MoE put it this way:

'If decisions are made by people who understand the problems, efficiency increases. This is the case now. So we have ample time to concentrate on policy matters. Because of the boards, issues of an operational nature, such as management of teachers' payroll, are exclusively dealt with at the district level. That is just one of the good lessons. Previously, you would have to go to provinces, districts, and even right up to the schools to collect information for planning purposes… Imagine how high the budget line for operational costs was?'

However, the reality suggests that there remains a huge gap between policy and practice. Top officials still exert supervisory control over the boards. For instance, the decentralization compact, instituted by the MoE, states that DEBs must be accountable to their constituencies for (i) the improvement of educational access, equity, relevance, and quality and (ii) improvement in the performance of the education system in service delivery. However, the general perception at national and district levels is that DEBs do not have discretion over such decisions. In practice, DEBs report to MoE headquarters through the PEO's office on almost all issues pertaining to the provision of basic education, with the exception of peripheral matters, such as monitoring of education standards in schools. Similarly, decisions concerning the approval of budgets and the allocation and use of funds are mostly

made at MoE HQ, which suggests that DEBs have little or no control of financial resources allocated by the central government (Sikayile, 2011).

While stakeholders at both national and district levels recognize that a certain degree of supervision or administrative control by MoE HQ is needed to guarantee successful implementation of decentralization, especially when sub-level units are inexperienced, they also contend that excessive control defeats the whole point of DEBs and the decentralization policy in general. The key challenge is to find the optimal degree of administrative control over local units, while ensuring that the latter have the necessary power and authority to execute the transferred administrative responsibilities.

Compromised rationale for efficiency

Sikayile's study also suggested that excessive central control over DEBs compromised the rationale for efficiency in the use of resources, one of the objectives of educational decentralization in Zambia. The majority (70 per cent) of stakeholders involved in the study raised concerns about the effects of the decentralization policy on efficiency, pointing out a huge gap between policy and practice. This is reflected in the following statement by a female teacher from Chongwe District, who was supported by other contributors:

> *'As much as the PEO and other officers from Lusaka are fond of making frequent visits to districts and schools, so too do DEB officials often travel to Lusaka, as we understand, for meetings which never end. Just think about it, the money which they use to burn fuel could be used to buy books and chalk for the poor school children. Please come to my office after this meeting so that you can see for yourselves the boxes of chalk procured from Lusaka without consulting us. Up to now, none of us has ever used that chalk because it can't write on the blackboard no matter how hard you press it. We had to use money from our pockets to buy what we are using now. Imagine!'*

Autonomy issues

Linking to the above discussions are issues related to DEBs' autonomy in decision-making. With the transfer of powers and responsibilities to DEBs, educational decentralization also granted the board and school managers a certain degree of autonomy to take independent decisions in the interests of their districts and schools, respectively (MoE, 1996).

The majority of participants in Sikayile's study argued that self-management, through the DEBs, was one of the major achievements of the decentralization policy and that it had led to remarkable improvements in the provision of basic education. The enthusiasm for local autonomy and the resultant increase in the effectiveness

in service delivery is evident in the following statement made by a Solwezi DEB member:

> *'Even if we don't have powers to make final decisions, our presence during board meetings matters a lot as it gives us an opportunity to influence the process of decision making. For instance, we do, in our limited capacity, have a say on the budget, we participate in joint monitoring activities at schools, which helps us to better understand problems faced (…). It is easy and less costly to monitor schools since we are closer to them than people from headquarters in Lusaka.'*

The study also suggested that the boards were increasingly and proactively acquiring autonomy, by executing legitimate control over some major decisions, such as teacher recruitment, redeployment, and payroll management.

However, some participants had a different perspective. They highlighted the conflict between the management and governance teams as an obstacle to the boards' legitimate control over the delivery of education at local level. Members of the two participating DEBs suspected the management team of coercing or undermining board decisions. It was found, for instance, that one management team met monthly to discuss issues concerning budgets, procurement plans, and reporting, often without the knowledge of governance team members. This situation, exacerbated by the lack of a legal framework, affects not only the boards' autonomy, but also local accountability and transparency in decision-making, which require close collaboration between the management and governance teams.

Some participants mentioned that, due to excessive central control over matters expected to be under their jurisdiction, DEBs had little or no leeway in making key decisions over most of the responsibilities transferred to them. This remark, by a member of Chongwe DEB, illustrates the situation:

> *'The problem in this country is that you have policies which are well written but, when it comes to implementation, it's something else. Even if we are not technocrats, we are able to point out some of the weaknesses. Many responsibilities have been transferred to us as boards but, unfortunately, issues like districts' annual budgets and work plans are still approved from Lusaka and often it takes too long. You can imagine! Even a simple decision such as purchasing of educational materials is also sanctioned from there. Besides, there is never a month passing without officials from Lusaka coming here to monitor, as if we can't do that. Sometimes, our colleagues from the management team are called on short notice even on minor issues such as taking information on how many books are needed for the district. Surely? Now tell me, how can you lower administrative costs or improve efficiency for that matter?'*

Education decentralization in Zambia also entails school-based management (through the PTA), as the policy document clearly states that 'entrusting greater power and authority to education and school managers, at district and school levels respectively, in addition to promoting community participation, leads to a strong sense of ownership and responsibility for these units" (MoE, 1996). The study by Sikayile suggests that, despite weak technical capacity and inadequate funding, the PTAs manifest a strong sense of ownership and responsibility, mostly through increased dialogue and transparency, which translate into improvements in education delivery. This is reflected in the following statement from a school head:

> *'I have been the head for this school for over 10 years and looking at the way we work as PTA members now there is a big difference compared to the past. Before, it was difficult to tell communities to contribute something even if it was for a noble course and nobody cared much about the condition of the school and the plight of the pupils. Everybody knew it was the duty of government (…) no wonder vandalism was rampant. But things have changed. All these new classroom blocks you can see here are simply because PTA members worked hand in hand with the community to build them, including making some of the desks pupils sit on. So, even if this school belongs to government, we are the owners because we have contributed so much to making it what it is today. I can tell you one thing! If you have put an effort into making something, you will most likely take care of it and protect it against vandalism.'*

This suggests that the contributions of PTAs and communities are critical to the achievements of the goals of decentralization. A small number of participants, however, mentioned that school managers and PTAs still have no discretion over minor decisions, such as the procurement of school requisites, which needs approval from the DEB, causing delay in service delivery. The case is illustrated in the following comment by a basic school PTA chair:

> *'The school records show that enrolment numbers are increasing year by year but we do not have adequate classroom places to accommodate every child from these surrounding villages. We have done all we can with the community to try and build two additional classroom blocks… see those moulded blocks outside! They have been there for over five months and the rains will soon start. It is so annoying that we have to wait for officials from the PEO and DEB's offices just to come and survey where the building should be located.'*

Where school managers and PTAs lack this kind of discretion, there is a risk to undermine effective school-based management. It should also be noted, however, that, on occasion, 'legitimate control' cannot be avoided, at least in circumstances where school managers and PTAs lack the authority, skills, and resources to effectively

manage the autonomy granted to them. In those circumstances, the reinforcement of school leadership can be a promising avenue for a successful implementation of decentralization policy and an effective means of education service delivery in particular.

Fiscal bottlenecks at district level

In addition to the administrative challenges discussed above, education decentralization in Zambia is hampered by a lack of funding sources at local level. Consistent with the principle that 'finance follows function' (Florestal and Coopers, 1997), the Zambian Government has made fiscal decentralization of the education sector a part of the process, with the aim of establishing and operationalizing financing mechanisms to ensure financial autonomy at local level and promote effective transfer of financial resources from MoE HQ to provincial, district, and school levels (GRZ, 2009).

In order to address the fiscal challenges and to guide the planning and financial management process at these different levels, the Government has developed a national fiscal framework, based on a number of measures and criteria, such as the 'special equalization fund' and the 'revenue allocation formula', intended to ensure the equitable distribution of financial resources across sub-sectors, levels, and programmes. Two main fiscal variables are used when allocating funds: the foundation variable and the factored variable. Through the foundation variable a fixed amount of money is equitably allocated to each operational level, such as district education office (DEO). With the factored variable, an amount of money is allocated to sub-sectors or operational levels, based on parameters such as pupil enrolment, school location, and gender parity index (MoE, 2007; NIF II, 2008–2010).

While the allocation criteria and measures seem straightforward, on paper at least, implementation highlighted the complexity of applying this wide range of measures. Not only do financial resources not reach regional offices as planned (JICA, 2012), but, more importantly, school and district grants are not allocated in a transparent way, do not support the 'pro-poor' strategy, and are not properly executed (World Bank, 2015). It was found, for example, that provinces with large-scale expenditure and enrolment have difficulties in implementing their budgets, due to low capacity. Around 30 per cent of primary schools do not receive any school grants, while most primary schools receive less than the intended amount. It seems that disbursement of school grants does not follow the budget allocation rule. More critically, there is a lack of information about the allocation formula and the amount of school grants at district and school levels. Therefore, most primary schools are not informed about the level of grant they are supposed to receive. This impedes the implementation of

free primary education policy, as half of government schools continue to charge fees to compensate for unreleased school grants (World Bank, 2015).

The implementation of fiscal decentralization is, furthermore, made more difficult by the weak link between plans and budget systems at central level, which affects DEBs due to their high dependence on government grants (Sikayile, 2011). Weak institutional capacity and poor accountability mechanisms, as discussed earlier, further compound the challenges.

Discussion

Decentralization has been a leading theme of both education research and policy discussion over the last three decades, as a large number of countries, developed and developing, have attempted to decentralize their education systems. The rationale for decentralization is the belief that shifting authority to lower management level is likely to enhance the quality, efficiency, effectiveness, equity, and responsiveness of public education (Ainley and McKenzie, 2000; Naidoo, 2005).

However, the literature suggests that decentralization reform has yielded mixed results, depending on country-specific contexts, the form and degree of decentralization, the strategies adopted for implementation, and the capacities of the actors involved. Countries which have engaged in the decentralization of their education systems report different benefits and pitfalls, as well as challenges and political implications (Zajda, 2006).

Zambia's education decentralization experience appears similar to that of most African countries. In their review of education decentralization policy and practice in Africa, Winkler and Gershberg (2003) conclude that: '…with respect to the lessons learned from international experience, Africa does relatively well in terms of informal or formal parental participation, does reasonably well in terms of the design of financial transfers to schools and local governments, and does quite poorly in terms of clearly assigning roles and responsibilities to local governments and in providing the mechanisms and information required for accountability'.

It is important to mention the experience of community schools, as the most common form of 'de facto' educational decentralization in Africa. Most of these schools have been established by communities, as a consequence of state failure to provide an education service. Increasingly, though, they have been supported by the government within the framework of decentralization. However, there are concerns that increased government involvement affects the creativity and independence of these schools. Community schools are an example of success in the sector, especially

in terms of reducing student and teacher absenteeism. There is also evidence that they produce improved learning outcomes (Winkler and Gershberg, 2003).

In Zambia, as in other African countries, these mixed results can be explained by the particular context in which education decentralization has been introduced. In fact, most African countries have adopted education decentralization as a strategy to achieve more cost-effective education service delivery against a background of severe deficiency in terms of access, quality, and performance (Winkler and Gershberg, 2003). This challenging context is further complicated by high rates of illiteracy among parents, poor banking systems, low levels of institutional capacity, and indications of state failure in many countries. The trend towards education decentralization in Africa has also been influenced by programmes of structural adjustment intended to address fiscal imbalances in the 1980s, and the transition towards a more democratic and market-driven form of politics in the 1990s (Ndegwa, 2002).

In spite of this generally mixed picture, some successful cases have been recorded. The evaluation research suggests that the magnitude of educational improvement brought by decentralization is small in most cases, and it occurs mostly where responsibilities are transferred to schools rather than sub-national government (Winkler and Yeo, 2007). A country like Uganda has experienced a number of benefits from education decentralization, in terms of increased participation, increased transparency and accountability, and improvements in capacity building. Transparency, in particular, has been enhanced through the publication, in the national press, of detailed information on the conditional grants transferred to districts, while schools and sub-counties have had to publicize their budgets and sources of funds (Winkler and Gershberg, 2003). This successful implementation was facilitated by a stable macro-economic environment, political will and commitment to education, and cooperating partners' interest in decentralization (UNESCO, 2004; Murphy, 2005; Namukasa and Buye, 2007), and occurred despite central government's involvement in military conflict during the same period (UNESCO, 2004). Nevertheless, even with these breakthroughs, the implementation process in Uganda faced political and financial challenges, partly due to insufficient funds transfers from central government and the fact that local governments had been neither consulted on, nor involved in, national budgets (Winkler and Gershberg, 2003).

Research shows that, in many cases, accountability mechanisms are undermined by poorly defined roles and responsibilities at different governance levels as well as among the various agencies and actors involved in providing, funding, and monitoring education services. These issues can be detected in countries such as Nigeria and Tanzania where politically motivated top-down decentralization reform has taken place. In Nigeria, for example, the federal recentralization of power has reduced

capacity, authority, and budget control at state and local levels, while accountability is affected by the overlap between roles at the three levels of governments and by duplications of function (Winkler and Gershberg, 2003).

A study on decentralization policy in four francophone western African countries (Benin, Guinea, Mali, and Senegal) found that poor delineation of responsibilities and power relations, and weak transparency mechanisms (weak accountability system), made it difficult to identify who was accountable for pupil performance, district education officials or school management committees (De Grauwe and Lugaz, 2007).

Managing the autonomy of lower-level units is another major challenge to the implementation of education decentralization. Lessons from international evidence suggest that autonomy at local level needs to be counterbalanced with an effective evaluation and accountability framework. This is not always the case. For instance, De Grauwe and Lugaz (2010) note the lack of information on the use of funds transferred to local offices or schools in the four western African countries they studied. Central authorities in these countries have given little attention to monitoring actions taken at local and school levels.

Furthermore, autonomy at the local level cannot yield the expected benefits unless it is supported by adequate institutional capacities. This point is made by Naidoo (2002) with reference to the situations of Ghana and Nigeria where the roles of district education offices, school management committees, and community-based organizations in the management of education provision were limited by capacity constraints. This reflects an important principle for effective decentralization: 'the mandate of all actors should take into account their resources, skills, and assets' (De Grawe at al., 2005). A study of decentralization in Thailand noted that successful implementation of school-based management rests on school leaders' capacity for leadership, strategic planning, entrepreneurship, and marketing (Gamage and Sooksomchitra, 2004).

A common finding in the literature on education decentralization worldwide concerns the gap between the rhetoric or policy intent and actual implementation. This partly reflects the fact that the decentralization of administrative and management functions is not often accompanied with the necessary implementation capacities (institutional, organisational, financial, and human), especially at local level (Geo-Jaja, 2006). But the implementation gap is about more than capacity, important though this is. The literature is replete with examples of country-specific challenges to decentralization, including cultural resistance to change, inadequate incentives and rewards, weak commitment from the centre, and so on.

For instance, Bjork (2004) found that Indonesian teachers' conservative civil service culture prevented them from making the most of the autonomy granted to them by decentralization reform. As civil servants, teachers showed resistance to change and continued to see themselves as accountable to the government rather than to students, parents, and local school boards. Bjork's study also found that the incentive (increased authority) offered to teachers who accepted new pedagogical responsibilities proved to be inadequate, as teachers were more interested in the security of their job than in influencing school policy or impacting on their students' lives. Financial reward would be more effective, but there was not enough of it. Another impediment identified in the Indonesian study concerns central-local relations. While there was a genuine desire among central officials to decentralize decision-making power, this was not accompanied with appropriate support. For instance, the centrally organized training workshops failed to meaningfully change attitudes or empower actors at lower-level units (Bjork, 2004).

Bray and Mukundan (2004), in their study of Kerala State (India), showed how complex and challenging the implementation of educational decentralization can be, even in a society with a high level of education, a long tradition of political participation, and a strong presence of civil society organizations. The implementation challenges encountered in Kerala match, in some respects, those described by Bjork on Indonesia. For instance, it was found that, contrary to the judgement of state-level planners, local-level actors did not have the capacity to deal with the substantial educational issues (as opposed to infrastructure and logistic issues), adding further to the implementation challenges. Similarly, it was difficult for some local-level actors to understand and interpret the 'highly academic' guidelines (including technical jargon) prepared by the state planning board. These capacity issues were intensified by the timeframe, as Kerala's authorities adopted a big-bang approach to decentralization, instead of gradually transferring decision-making powers to lower-level units, in accordance with the perceived improvement in their management and leadership capacities (Bray and Mukundan, 2004).

While this discussion indicates the complexity and challenges involved in implementing educational decentralization, particularly in developing countries, it also supports an internationally shared belief that decentralization, if properly implemented, is the most effective and efficient way of managing education (Winkler and Gershberg, 2004; De Grauwe and Lugaz, 2010). The study by De Grauwe and Lugaz (2010), for example, highlighted that all major education stakeholders consider decentralization to be the way forward. Therefore, acknowledging the related implementation challenges should not lead to a rejection of decentralization reform, but rather to its cautious application and the exploration of innovative strategies to address potential obstacles.

RECOMMENDATIONS

- MoGE should establish a clear and strong regulatory framework, backed by renewed political commitment and adequate funding, to support implementation of educational decentralization. This framework should clearly outline coordination arrangements and provide clear operational guidelines that specify power relations between and among members of the board, with clear delineation of their different roles and responsibilities.
- MoGE should ensure that staff training and profiles match the assignment and expected performance, namely the operationalization of the regulatory framework for effective implementation of decentralization. In addition, MoGE should provide systematic in-service training for DEB staff to update them with new knowledge and skills in order to enhance their capacity to innovate and cope with emerging challenges.
- MoGE should promote a management approach which reinforces complementarity in roles and authority between the centre and the sub-level units (DEBs, PTAs, communities, schools) in order to counterbalance the risks associated with abuse of authority within DEBs or excessive control from the centre.
- MoGE should develop and disseminate transparent and clear guidelines on grant distribution to DEB officers and school principals, with appropriate training for better understanding and use of the grants. This is intended to improve the efficiency of grant disbursement and use.
- In the same vein, MoGE should establish a specific monitoring and technical support mechanism to anticipate and address critical issues. A forum for communication and exchange of experiences and best practices can be created for this purpose.

Policy issue 2: Weak budgetary performance: late, erratic, and inadequate funding

While the Zambian Government continuously increases the share of education budget, the effective implementation of education programmes and activities are affected by late, erratic, and inadequate disbursements.

Evidence

While sector allocations are earmarked in budget documents, the education ministries face a number of budget planning and management challenges, due to the discretionary power of the Ministry of Finance and National Planning (MoFNP) over the release of funds, the limited absorptive capacity, and the lack of skilled staff. In fact, while all

government ministries, including the Ministry of Education, prepare and submit their budgetary requirements, the amount of budget allocated to each ministry is the result of a discretionary decision of MoFNP on the basis of the resources available to it. This is a source of fluctuation in budgetary allocations and disbursements to the Ministry of Education. For instance, in 2014, MoFNP released a total of ZMW 2.014 billion from the non-PE budget component to MESVTEE, 81 per cent of the budgeted ZMW 2.496 billion. This partial release of education funding badly affected a number of programmes, particularly infrastructure programmes, as detailed in *Table 13*.

Table 13 Consequences of partial release of non-PE component by MoFNP

Budget lines	Allocated (in ZMW)	Released (in ZMW and as a %)	
Infrastructure development at provincial level [Resource Development Centers (RDC) to PEOs]	378 m	124 m	33%
Infrastructure development at the science division	327 m	157 m	48%
RDCs for headquarters at science	144 m	73 m	51%
Bursaries committee administration	257 m	229 m	89%
Grants to colleges of education	12 m	6.8 m	57%
School infrastructure at the 220 upgraded basic schools	320 m	100 m	31%
Plan to replace pole and mud structures at community and state schools	36 m	10 m	28%

As discussed earlier, while Zambia's educational expenditure in percentage of GDP has been stable over the last five years, its level remains relatively low in comparison to SADC and the African averages. Besides, education funding was affected by a sharp decline in external aid to education, which dropped from 18 per cent of the total sector expenditure in 2009 to only 3 per cent in 2014 (World Bank, 2015), partly due to the reduction in the number of cooperating partners. During the mission review, some partners pointed out issues related to efficiency, transparency and accountability in the use of resources, as a reason for donors' reluctance.

Notwithstanding concerns about the limited education budget, not all disbursements from MoFNP are utilized by the Ministry of Education, cases of insufficient absorptive capacity have been reported, which have sometimes led to the return of unutilized funds by the end of the financial year. According to some officials, the apparently weak absorptive capacity of the Ministry of Education can be explained by the delay in the release of funds by MoFNP, especially when funds are disbursed in

the last quarter, leaving insufficient time to the Ministry of Education to spend them properly (Beyani, 2013; JICA, 2012). MESVTEE's 2015 financial report highlights the non-release of the fourth-quarter operational fund as one of the recurrent factors that affected budget performance in 2013 and 2014.

Analysis of budget performance also shows a noticeable gap between authorized provision and funded budget (low funding rate), while the difference between funded budget and the actual expenditure is very low (high execution rate), except for basic and secondary education (see Table 14).

Table 14 Education funding rates and execution rates, 2013 (million ZMW)

	Authorized provision	Funded budget	Actual expenditure	Funding rates	Execution rates
	a	b	c	d=b/a	e=c/b
Basic	3,054	2,973	2,994	97%	101%
High school	691	661	661	96%	100%
Teacher education	122	104	102	85%	98%
TEVET	49	34	33	69%	97%
Higher education	473	409	413	86%	101%
Science and technology	56	40	39	71%	98%
Administration*	1337	1061	967	79%	91%

Source: World Bank, 2015.

* The capital expenditures for different sub-sectors are included under 'Administration', as most of this expenditure is under the project unit at headquarters. Therefore, the low execution rate, particularly for 'Administration', is due to relatively low implementation of capital expenditure in education.

The issues of budget execution appear to be more challenging at sub-national levels, particularly for general education, with performance varying with budget item and province. It was found, for instance, that while 100 per cent of personnel emoluments were executed in 2013, only 84 per cent of the budget related to DEB grants for primary education was disbursed to DEBs. At the same time, certain types of grants were overly executed, such as the grant for free primary education (106 per cent), and provincial grants for free early childhood education, secondary education, and special schools (105 per cent). It was also found that the quality of budget execution was linked to a province's enrolment size and expenditure, i.e. provinces with large-scale enrolment and budget (e.g. Copperbelt) tend to have a lower execution rate, while those with small-scale enrolment and budget have a higher execution rate (World Bank, 2015).

Analysis of budget allocation in primary education suggests that the disbursement of school grants does not conform to the budget allocation formula, which refers to three factors: (i) school location (remoteness); (ii) gender parity index; and (iii) school size (enrolment). A study by the World Bank (2015) showed that these factors explained only 18 per cent of the actual grants disbursed to primary schools. This suggests either flawed implementation of the funding formula or the proper amount not being disbursed to schools. It seems that provinces apply different weights to these factors, adding to the various challenges of implementing decentralization.

Related to the above situation is the fact that a number of primary schools (estimated at 28 per cent in 2013, though there is wide variation between provinces) do not receive any school grants from the government. Consequently, 27 per cent of primary pupils still pay school fees (through PTA). It is also estimated that 60 per cent of secondary school students pay fees for tuition. In fact, government funding per student, estimated at ZMW 22 for primary education and ZMW 25 for secondary education, represents only 64 per cent and 10 per cent, respectively, of annual revenues per student (including both public and private sources). Moreover, this level of funding per student remains far below the target of ZMW 46 (for primary) and ZMW 144 (for secondary), suggested in the Performance Assessment Framework (PAF) of 2015 (World Bank, 2015). This constitutes an enormous challenge to the Government's free primary and secondary education policies, as confirmed by a number of stakeholders met during the review mission.

To address planning and budgeting challenges, the Government of Zambia has taken steps to establish effective mechanisms and tools to ensure the optimal allocation and use of available resources. Efforts in this direction include the introduction of the comprehensive Public Expenditure Management and Financial Accountability (PEMFA) programme, the Medium-Term Expenditure Framework (MTEF), the Financial Management Information System (FMIS), and the outcome-based budgeting approach (OBB).

Launched in 2005, PEMFA came into effect in February 2006, with the overall objective of contributing to government efforts to improve capacity to effectively and efficiently mobilize and utilize public resources (improve public expenditure management) and strengthen overall financial accountability. PEMFA's effectiveness, however, is constrained by limited access to information on how funds are allocated and spent, suggesting a need for the ministries of education and finance to track the use of resources allocated to and spent in each sector and sub-sector in order to improve accountability for use of financial resources (Beyani, 2013).

The Government introduced the Medium-Term Expenditure Framework (MTEF) as a new budgeting approach, with the aim of addressing most of the weaknesses in the budgeting process and ultimately strengthening the entire management of public expenditure. The MTEF is a multi-year budgeting system that allows the government to plan expenditures for a number of years in order to enhance predictability in the flow of resources while strengthening the linkages between government priorities, strategic plans, and budgeting and service delivery. The adoption of MTEF, in addition to PEMFA, has helped make the budget process more elaborate and consultative, though some challenges still persist, including insufficiently skilled staff, and weak capacity to establish a results-based budgeting system or to ensure proper budget execution. Similarly the FMIS, established as an accounting tool geared at promoting accountability and transparency of public resources, faces challenges in terms of compatibility with government departments and, again, a lack of skilled personnel (Beyani, 2013).

Recent government efforts towards enhanced budget management include the adoption, on a pilot basis, of the OBB in 2015. However, according to the Joint Annual Review (2015), this budgeting approach proved to be ineffective, due to the incompatibility with the current structure of ministry. Nevertheless, this remains a commendable initiative that needs to be pursued through proper alignment of ministry functions with OBB dictates.

Despite the efforts described above, erratic and inadequate funding from the MoFNP remains a major obstacle to the smooth implementation of educational programmes (MESVTEE, 2015; JAR Report, 2015).

Discussion

A number of UNESCO reports indicate that, over the last decade, many sub-Saharan African countries have demonstrated strong political commitment to education, as witnessed through robust national action plans and enhanced investment in education development (GMR, 2013, 2014, 2015). Despite the increased level of education spending in the region, the lack of adequate, equitable, and sustainable financing continues to be a major challenge to the achievement of education goals and targets. A number of studies suggest that meeting the cost of education in sub-Saharan Africa requires a long-term approach that provides stable, predictable, and adequate funding, rather than the current erratic and unpredictable funding that prevails in most countries (OECD, 2008).

The latest available data (2012/13) show that half of sub-Saharan African countries spend 5 per cent of GNP or more on education. The figures range from less than 2 per

cent in countries such as the Central African Republic, the Democratic Republic of Congo and Zimbabwe to 10 per cent in Botswana. In most countries for which data were available, a noticeable increase was observed in the share of national income devoted to education in the last decade. In most countries (19 out of 26 of those with data), increases in public spending on education exceeded economic growth rates (GMR, 2015).

Like other African countries, Zambia has gradually improved the level of education funding over the years. However, despite the Government's continuous effort to increase the share of the education budget, funding levels remain low by regional standards. For instance, in 2013 SADC countries devoted an average of 16.7 per cent of government expenditure to education, compared to Zambia's 15.3 per cent. Similarly, Zambia's share of GDP devoted to education (4.3 per cent) is lower than the average for the SADC sub-region (4.9 per cent) and that for sub-Saharan Africa (4.5 per cent).

Furthermore, in per capita terms, Zambia's per pupil expenditure (PPE) in primary education as a percentage of GDP per capita stands at 10 per cent, much lower than the average PPE in primary for SADC countries, which is 13.5 per cent, and the African average, which is 11.7 per cent.

It is important to note that Zambia did not provide recent educational data to UNESCO's Institute for Statistics (UIS). Therefore, one should apply caution when comparing the UIS data contained in *Table 15* with Zambian data (from World Bank, 2015), which were not necessarily produced using the UIS standardized approach for internationally comparable data and statistics.

Due to already high commitments to educational development and the growing resource constraints that many African countries are experiencing, allocating more resources to the education sector may not be realistic for some of them. This is mostly because of the difficult trade-offs between education and other important sectors. Hence, increasing predictability, enhancing funds management and effectively disbursing all the committed resources to deliver planned educational services are key for meeting education challenges successfully despite limited resources (UIS, 2011). Besides, transparency and accountability in the use of resources is necessary not only to make the most of the available money, but also to address donors' reluctance, particularly in the Zambian context of reduction of the number of CPs and recent declining pace of economic activities.

Table 15 Public expenditure on education as a percentage of GDP in SADC countries

	Government expenditure on education as % of GDP	Government expenditure on education per pupil as % of GDP per capita		
		Primary	Secondary	Tertiary
Angola	3.5	–	–	–
Botswana	–	–	–	–
D.R. Congo	2.2	7.4	5.4	75.1
Lesotho	–	–	–	–
Madagascar	2.1	6.6	8.4	102.6
Malawi	6.9	13.6	30.2	1,754.0
Mauritius	5.0	13.5	29.2	11.0
Mozambique	6.7	15.5	70.0	185.5
Namibia	8.4	17.6	–	–
Seychelles	3.6	8.7	6.7	542.5
South Africa	6.1	17.7	19.0	37.9
Swaziland	8.6	20.8	42.7	–
Tanzania	3.5	–	12.1	651.3
Zambia	4.3*	10.0*	27.0*	156.0*
Zimbabwe	2.0	–	–	62.0
SADC (average)	4.9	13.5	24.9	380.2
Sub-Saharan Africa (average)	4.5	11.7	19.6	104.7

Source: UNESCO, EFA Global Monitoring Report, 2015.

* Data for Zambia are from the World Bank (2015): the figure on primary refers to basic education and includes lower secondary education; the figure on secondary includes only upper secondary education (Grades 10-12). Caution should be exercised when comparing these data with those from UNESCO.

This requires credible education finance and expenditure data which, in many countries, are scarce and affect strategic and evidence-based decision-making and management. In many cases, education finance data are not available in education ministries which are often seen only as implementers of educational services, while finance ministries have the main responsibility for planning and allocating budgets,

as well as monitoring expenditure. The discussions with stakeholders met during the review meeting suggested that this seems to be the case in Zambia. Hence, close collaboration between these two ministries, especially in the areas of data and funds management, is necessary to address this issue.

RECOMMENDATIONS

- The Zambian Government should consider increasing the budgetary allocation to education, in line with many SADC countries, and ensure that the Ministry of Finance disburses funds in full and in a timely fashion to MoGE and MoHE so they can effectively implement national education policies. This implies strengthening coordination between these ministries and the Ministry of Finance.
- The two education ministries should further strengthen the link between planning and budgeting, particularly through enhancing OBB, in order to ensure that allocated education funding is directed to specific targets and achieves the intended results.
- The two education ministries should develop and/or strengthen mechanisms for permanent monitoring of sector budget performance through the establishment of an effective budget information system, with periodic benchmarks and warnings in order to anticipate problems (e.g. delays in disbursements or execution) and ensure timely interventions.
- The two education ministries should address the concerns of development partners, in light of declining aid to education and the departure of some CPs, by enhancing transparency, efficiency, and accountability in the use of educational resources.
- The Government should further strengthen and modernize the Financial Management Information System (FMIS), with skilled staff and appropriate software tools, to provide accurate and timely budgeting and financial information across the government system and to education ministries in particular.

Policy issue 3: Inefficient intra-sectoral budget allocation and utilization

The intra-sectoral budget distribution indicates a clear priority given to basic education, but raises concerns about the almost complete neglect of preschool, the inadequate funding allocated to TEVET, and the relatively low attention given to higher education.

Evidence

The pattern of budget allocation within the education sector gives an indication of the Government's policy priorities in the sector. *Table 16* shows the distribution of government expenditure by educational level/programme for the period 2006–2015.

Table 16 Share of government expenditure by educational level (2006-2015)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average 2011-2015)
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Budget	
Basic	42.6%	36.9%	46.0%	45.4%	51.6%	41.5%	50.8%	57.5%	55.9%	57.0%	**52.5%**
High school	10.2%	7.9%	9.4%	10.9%	12.2%	9.7%	11.4%	12.7%	12.8%	22.4%	**13.8%**
Teacher education	3.1%	2.4%	2.3%	2.0%	2.2%	1.9%	2.0%	2.0%	2.2%	0.0%	**1.6%**
TEVET	0.2%	0.2%	1.1%	0.7%	0.4%	0.4%	0.9%	0.6%	0.7%	1.6%	**0.8%**
Higher education	10.7%	12.0%	11.2%	11.0%	9.9%	10.0%	8.5%	7.9%	4.5%	12.6%	**8.7%**
Science and technology	0.2%	0.2%	0.4%	0.3%	0.2%	0.3%	0.9%	0.7%	0.7%	0.8%	**0.7%**
Admini-stration	33.0%	40.4%	29.6%	29.8%	23.5%	36.1%	25.4%	18.6%	23.0%	5.6%	**21.7%**
Total (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**
Total (million ZMW)	1,513	1,851	2,371	2,847	2,909	3,522	4,501	5,209	8,599	9,415	

Source: World Bank, 2015.

While the Zambian pattern of budget distribution reflects the priority accorded to basic education, in line with national policies and the country's international commitments to EFA and the MDGs, the higher levels of education, namely secondary, TEVET and tertiary education, are relatively underfunded, particularly when compared with the SADC and the sub-Saharan African averages (*Table 19*). Government spending on primary and secondary education steadily increased during the period under review, and accounted, on average, for 66 per cent of the total government budget over the last five years. In terms of internal allocation, most general education expenditure is on staff salaries. For instance, in 2013, salary accounted for 89 per cent of general education expenditure, while the remaining was devoted to infrastructure development (8.5 per cent) and school grants for education materials and free primary and secondary education (2.5 per cent).

TEVET and higher education have received relatively low funding allocations over the last five years, accounting, on average, for 0.8 per cent and 8.7 per cent of the total public education funds, respectively. A consequence of this intra-sectoral allocation

can be seen in the big differences in the development of the three sub-sectors (see the pyramidal structure of Zambian education, illustrated in *Figure 4* of *Chapter 1*). The diagram presents an education pyramid with a heavy base, indicating wide access to primary level, narrowing to a pinpoint at its apex, suggesting low transition to secondary, and a very low access to tertiary education. It is important to note that such an imbalance may also affect the smooth development of the sector, given the interdependence of the three sub-sectors. Success in general education is largely dependent on performance at higher levels (TEVET, tertiary education), which provides teachers, managers, and technical staff, as well as pedagogical research for education development.

When considering the public unit cost by sub-sector, taking into account differences in enrolment size, it is striking to note that government expenditure per TEVET student is low in comparison to other sub-sectors' unit cost, particularly when compared with unit spending at high school. As discussed later in the TEVET section, this trend is explained by the fact that TEVET staff salaries are not paid by the Government.

Table 17 Trends in government expenditure per student by level of education (ZMW)

	2008	2009	2010	2011	2012	2013	Ratio to primary education	As % of GNI per capita
Basic education (G1-9)	332	386	474	429	637	849	1.0	10%
High school (G10-12)	916	1,167	1,568	1,406	1,790	2,265	2.7	27%
Teacher education	--	--	--	--	--	7,566	8.9	91%
TEVET	802	603	362	474	1,195	--	1.9	16%
UNZA and CBU		14,460	12,363	13,229	12,713	12,921	15.2	156%

Source: World Bank, 2015.

As *Table 17* indicates, expenditure per student in general education (basic and high education) has increased steadily since 2008. In 2013, expenditure per high school student was estimated at ZMW 2,265, which is 2.7 times higher than that for basic education students (ZMW 849). This difference can be explained by smaller student-

teacher ratio in high school, higher teacher salaries, higher cost of equipment and facilities, and so on. Public spending per student in teacher education is 8.9 higher than per-student spending in basic education, while public spending for a university student is 15.2 times that allocated for a basic student. This pattern is common among different education systems; the tertiary education unit cost is considerably higher than that for lower levels of education, due to increased staff remuneration, the higher cost of infrastructure, logistics and equipment, higher management costs, and so on.

However, the large difference between TEVET unit spending (ZMW 1,195) and high school (ZMW 2,265) and university unit spending (ZMW 12,921) suggests that the government prioritizing of TEVET is not being translated into adequate funding support. Since the enrolment size of public universities is similar to that of public TEVET institutions, it is striking that university unit spending represents more than ten times the per-student expenditure of the TEVET sub-sector. Besides, while low public funding to TEVET may be explained by the fact that TEVET institutions generate their own resources, Zambia's share of public spending on TEVET is the smallest among African countries (see *Table 18*). Moreover, Zambian unit spending on TEVET as a percentage of gross national income (GNI) is very low (16 per cent), in comparison with other African countries, such as South Africa, Uganda, and Rwanda which spend, respectively, 51 per cent, 263 per cent, and 311 per cent per post-secondary, non-tertiary student (World Bank, 2015).

Table 18 Country comparison in TEVET spending as a % of government spending

	TEVET expenditure as a share of total government expenditure	Year
Bangladesh	2.0	2001
Central African Republic	7.4	2008
Costa Rica	5.6	2005
Gambia	2.6	2009
Ghana	1.1	2008
Liberia (Recurrent)	8.5	2012
Malawi (Recurrent)	3.4	2007
Pakistan	5.7	2002
Rwanda (Recurrent)	9.6	2012
Sierra Leone (Recurrent)	3.4	2007

	TEVET expenditure as a share of total government expenditure	Year
South Sudan (Recurrent)	1.1	2009
Swaziland (Recurrent)	2.4	2007
Tajikistan	3.0	2006
Uganda	4.0	2004
Yemen	0.7	2006
Zambia	**0.6**	**2013**

Source: World Bank, 2015.

Despite this low level of public funding of TEVET, the Word Bank (2015) reported some major achievements in this area, including: (i) sound financial management at institutional level; (ii) an increasing trend in training in science and engineering; and (iii) high employability in the formal sector, particularly when compared to Grade 12 graduates.

As with TEVET, the share of total government education spending allocated to higher education – when considering its trend and the average (8.7 per cent) for the last five years – seems to contradict the Zambian Government's commitment to improving the country's human capital through increased access to higher education. The Government's policy notes the importance of expanding higher education, as a driver of economic and social development towards Zambia's ambition of becoming a prosperous middle income country by 2030. However, Zambia's share of government spending on higher education is relatively low compared to most other African countries. In 2013, the average share of government education spending devoted to higher education was 18.6 per cent in the SADC countries, and 20.3 per cent in sub-Saharan Africa.

The public financing of universities in Zambia consists mostly of operational grants, bursaries, and infrastructure development, which accounted, respectively, for 35 per cent, 50 per cent, and 15 per cent of total public expenditure on higher education in 2013. While funding shows a gradual increase over the years, some concerns have been raised about the use and management of that resource. First, it has been found that the bursary-loan scheme, initially designed to support students from poor households, benefits the relatively rich segments of the population, since 77 per cent of university students come from the 10 per cent richest households in the country (World Bank, 2015). Furthermore, although the current bursary scheme is a loan scheme, none of the beneficiaries has repaid the loan since its introduction in 2004.

Therefore, the current bursary scheme is not efficient and tends to worsen equity in access to both higher education and public resources. It needs to be revised if it is to become self-sustaining.

A second concern relates to the effectiveness of resource management in universities. While public universities are granted financial and academic autonomy, their financial status is characterized by chronic budget deficit and arrears, despite their efforts to increase their revenue base. Both the University of Zambia (UNZA) and Copperbelt University (CBU) rely on government grants for about half of their annual budget, but their expenditure persistently exceeds their revenue. The chronic budget deficit is driven largely by the salary burden, due to the large number of staff and the high level of remuneration in universities. While high levels of remuneration are necessary to attract internationally competitive staff, sound resource management is needed to ensure the sustainability of the higher education financing system.

While issues of fund management in TEVET and higher education need to be rigorously addressed, it should be stressed that these sub-sectors remain underfunded by regional standards. It is important also to note that the weak development of secondary and tertiary education seems inconsistent with Zambia's ambition to become a prosperous middle-income country by 2030. In fact, Zambia's national development policy relies on human capital, namely TEVET and tertiary education, to achieve sustainable socio-economic development and concretize its 2030 vision.

Discussion

The intra-sectoral allocation of education expenditure varies across countries, reflecting differences in policies and priorities. While primary or basic education is a priority in almost all countries, averaging nearly 44 per cent of total education expenditure in the SADC and 46.3 per cent of total education expenditure in sub-Saharan Africa, it is striking that the average share for pre-primary education was only 1.8 per cent, on average, in SADC countries and 0.7 per cent in sub-Saharan Africa for the school year ending in 2013. The Zambia situation is even more striking, as the pre-primary education budget was almost nil, while basic education was allocated 57.5 per cent of government education expenditure in 2013. The Zambia EFA 2015 National Review (2014) mentioned that MESVTEE had made budgetary provisions, accounting 0.05 per cent of the 2015 education budget, for the early childhood development (ECD) sub-sector. This allocation is expected to grow over the medium term as MESVTEE develops school infrastructure.

As *Table 19* shows, Zambia's share of educational expenditure to secondary (12.7 per cent) and higher education (7.9 per cent) are significantly below the SADC and the African averages.

Furthermore, while basic education receives the largest share of government educational expenditure in Zambia, about 90 per cent of this fund is allocated to personal emoluments, leaving little for educational requisites. This, as pointed out by stakeholders during the review mission, represents a challenge to the Government's intention to enhance education quality and learning outcomes.

While there is no simple formula for deciding the budget share to spend by level of education and by educational domains or objectives, the trends indicate that most countries has focused on the realisation of UPE or UBE, first in terms of access and participation, and then in quality improvement. As Zambia has almost reached UPE, though quality has still to be enhanced, its efforts should be directed to develop the post basic education, including TVET and higher education that are essential for the realization of the country ambition to become a prosperous middle income country by 2030.

Therefore, Zambia needs to strategically reallocate its educational resources to ensure a balanced sector development, in line with its development vision. It is also important that available funds are effectively and efficiently used and managed to achieve the education goals and objectives, including equity, inclusion and quality at all levels, particularly in TEVET and higher education where equity issues are prevalent.

This suggests that Zambia still needs to increase its long-term commitment to public financing of education, especially in light of its Vision 2030. In fact, as Zambia's educational funding levels are still relatively low compared to other countries with similar development contexts, there is still leeway for fiscal expansion, given the country's relatively favourable current and projected macroeconomic context (good economic growth with significant potential for increasing public investment in education).

As suggested in the 2014 EFA Global Monitoring Report, countries need to raise 20 per cent of their GDP in taxes to achieve their development goals. However, few low- or middle-income countries manage to mobilize domestic resources on this scale and many do not devote a sufficient proportion to education. However, a country like Namibia has demonstrated that this is doable, raising 24 per cent of its GDP in taxes and allocating 22 per cent of its government budget to education. This is an example that should be followed by other countries, including Zambia particularly, in relation to its Vision 2030.

Table 19 Public expenditure on education as a percentage of total government expenditure on education in SADC countries

	Expenditure by level of education (as % of total government expenditure on education)				
	All levels	Pre-primary	Primary	Secondary	Tertiary
Angola	8.7	–	–	–	–
Botswana	–	–	–	26.3	–
D.R. Congo	16.8	1.0	61.6	37.2	22.0
Lesotho	–	–	–	–	–
Madagascar	14.0	0.2	47.4	34.5	15.2
Malawi	16.3	–	49.5	19.3	21.5
Mauritius	20.9	1.7	22.7	34.1	7.1
Mozambique	19.0	–	49.2	61.6	13.7
Namibia	26.2	–	40.0	30.6	23.1
Seychelles	10.4	–	24.0	29.0	32.5
South Africa	19.1	1.5	38.8	–	12.2
Swaziland	22.4	0.2	48.7	11.8	12.8
Tanzania	17.3	6.0	49.2	29.2	21.4
Zambia	**15.4***	**0.05****	**57.5***	**12.7***	**7.9***
Zimbabwe	8.7	–	51.6	25.6	22.8
SADC (average)	**16.7**	**1.8**	**43.9**	**29.8**	**18.6**
Sub-Saharan Africa	**16.7**	**0.7**	**46.4**	**29.0**	**20.3**

Source: UNESCO, EFA Global Monitoring Report 2015.

* Data for Zambia are from the World Bank (2015): the figure on primary refers to basic education and includes lower secondary education; the figure on secondary includes only upper secondary education (Grades 10-12). Caution should be exercised when comparing these data with those from UNESCO.

** This figure refers to budgetary provisions for 2015.

RECOMMENDATIONS

- Government must ensure a harmonized expansion of different education sub-sectors, through a rational intra-sectoral allocation, taking into account the necessary articulation between the education sub-sectors and the particular roles expected from TEVET and higher education, as drivers of the social and economic development needed to sustain Zambia's Vision 2030.
- Government should further ensure that the rebalancing of intra-sectoral budget allocations to pre-primary and post-basic education levels (TEVET and higher education) is accompanied with effective equity and inclusion policies, in order to maximize the impact of the limited public resources for education.
- Government should address structural inefficiencies in resource management in higher education, particularly by: (i) strengthening the bursary mechanism for the identification of the eligible candidates, while giving clear authority for the enforcement of the law related to the bursary loan scheme; and (ii) reforming and modernizing the management of human resources in universities, by revising the remuneration of university staff and applying an optimal student-staff ratio (referring to the performance of universities in similar country contexts) in order to progressively clear the financial accounts of the universities.
- Government must increase public expenditure on TEVET to enhance diversified skills training, which is needed to sustain economic growth and to achieve Zambia's ambition of becoming a prosperous middle-income country by 2030.

Policy issue 4: Weak national capacities for effective strategic planning and management of education development, including plans' implementation, monitoring, and evaluation

Despite the established long tradition for education planning, as witnessed by quite good policy documents as well as legal and institutional provisions, Zambia still faces some challenges, particularly when it comes to implementation, and monitoring and evaluation. The implementation gaps are mostly explained by the lack of funding, the weak accountability system and, to some extent, the shortage of skilled staff, especially at decentralized levels.

Evidence

National capacity for educational planning and management has been a recurrent issue in this policy review with the Zambian educational stakeholders, particularly

with regard to the implementation of educational programmes at sub-national levels within the framework of the educational decentralization policy.

Zambia has put in place appropriate structures and mechanisms for implementing the full cycle of education strategic planning, including EMIS, sector analysis, planning, implementation, monitoring and evaluation.

Zambia has a well-established EMIS, which is the country's main source of education data for planning and budgeting purposes. Housed in the Directorate of Planning, the EMIS covers all levels and aspects of the education system, including ECD, primary, secondary, TEVET and tertiary education. EMIS data are supplemented by those collected by the Central Statistical Office (CSO), particularly on demographic and financial factors. According to Beyani (2013), the EMIS data is generally found to be credible, as considerable attention is paid to its accuracy and methodology. However, he noted some concerns with regard to some data and indicators, such as net enrolment rates and pupil completion rates, which are sometimes misleading and unreliable and, thus, fail to provide a sound basis for analysis. The information on private educational institutions has also been found to be weak, and is mostly limited to the number of such institutions and the number of students at each level of education.

EMIS data are published annually in the Ministry's statistical bulletin. However, it has been reported that the collected data are not user-friendly (Beyani 2013), since the rigid design of the system makes the customization of tabulations difficult, thus preventing deeper analysis. Furthermore, the statistical bulletins and annual reports do not provide analytical information, for instance, in the form of an analysis in relation to benchmarks or targets to justify the use of public funding and reflect accountability aspects (Word Bank, 2015). Most of these issues arise from a lack of capacity, in terms of skilled staff and financial resource (Beyani 2013). In fact, the appraisal of NIF II noted that EMIS operations had been affected by the loss of trained staff both at HQ and at sub-national levels, as trained staff had either been transferred to other government ministries or had left the Ministry of Education for other institutions, whether in the private or non-governmental sector, which offer more attractive remuneration (Chileshe, 2012).

As mentioned above, the Government of Zambia has established a tradition of strategic education planning and management, based on a well-established EMIS. Successive education plans (NIF I, NIF II, and NIF III) have been based on thorough and participative sector diagnosis and policy dialogue. Programme design and prioritization result from a systematic sector-wide analysis, including the review of the prevailing situation in each sub-sector, the planned policy changes, the proposed

strategies, the planned activities, and the performance indicators. Again, thanks to the established EMIS, the ESP is reinforced by a comprehensive cost simulation model and the related annual work plan and budget, which can be used as a resource utilization tracking instrument. However, most of this work is done with significant support from cooperating partners, suggesting weak national planning capacity.

Table 20 A review of planning and management capacity within Zambia's MoE

	Evidence/observations
Relevance	
Is the MoE showing commitment?	Increased level of public funding to education shows government commitment to education development. But a number of important initiatives are carried out in response to requests from donors, indicating that the commitment of the MoE is not very high. Also, delays in the formulation of NIF III may raise questions about the MoE's commitment.
Are stakeholders able to participate in the process of formulating sector plans and policy-related documents?	While bi- and multilateral development partners are actively involved in education policy and planning, some important stakeholders, such as communities, parents, and some CSO representatives, have no capacity to contribute meaningfully to the planning process. The private sector is not effectively involved in the planning process. Opinions and insights from schools and communities are not always considered.
Is the MoE showing accountability?	The mid-term review of NIF II mentioned lack of accountability and weak service delivery of educational administration as the root causes of poor quality of education.
Efficiency	
Are the roles of each stakeholder in and outside the MoE clear?	Positions and responsibilities of officers of the MoE are stated in formal documents, but the actual allocation of human resources does not reflect initial plans. Stakeholders have not comprehended their respective roles as there is still no progress in the implementation of decentralization. Contrary to policy discourse, decision-making power has not, in reality, been transferred to provinces, districts, and schools. Stakeholders have not been involved in the decentralization process and there is a need for more consensus building.
Are plans such as the sector plan compatible with policies of higher order?	The education sector plan (NIF III) and the annual work plan and budget (AWPB) are integrated and well-aligned with national development plans. The NIF III is an implementation plan of the SNDP, as NIF II was for the FNDP, and so on.
Are methods taken to prevent corruption (such as adoption of a monitoring system)?	While this review did not find significant information on corruption in the education sector, some cases of corruption have been reported in the health and transport sectors in recent years. Also, Zambia experienced slight regression with regard to the corruption perception index and the World Bank aggregate governance score. Steps have been taken, through the Public Expenditure Management and Financial Accountability programme, to improve predictability and control in budget execution, as well as strengthen financial accounting, reporting, and recording. An anti-corruption commission is in place to prosecute and convict high-level officials. The Office of the Auditor General and the Zambia Revenue Authority have recently been strengthened.

	Evidence/observations
Effectiveness	
Are goals in the sector plan achieved?	While remarkable achievements have been made with regard to access in basic education, there are still challenges to enhance access at secondary level. However, education quality has not shown meaningful improvement, and did not meet the levels set out in the NIF III and FNDP. The relatively high teacher salaries in general education (compared both to domestic wages and to their counterparts in other African countries) are not reflected in student learning outcomes. Equity in education also remains a big challenge. The review undertaken for SNDP reported that, under the FNDP, the MoE failed in its plan to construct 7,500 primary classrooms and 100 high schools by 2010, achieving only 61 per cent and 47 per cent, respectively, of its targets, indicating weak planning and absorptive capacity.
Are actions taken and budgets used in compliance with the sector plan?	MESVTEE's 2015 financial report revealed low budget performance for many sub-sectors and programmes in 2014: administration (62 per cent); teacher education (62 per cent); curriculum (65 per cent); and infrastructure (82 per cent). Budget performance for personal emoluments was 97 per cent. The remaining 3 per cent of the payroll budget allocation can be attributed to savings from retired or deceased officers and overall prudent payroll management. The budget performance for equity grants reached 91 per cent, and the overall implementation rate stood at 90 per cent of the 2014 ministerial budget. While this gap may be attributed to non-wage adjustments in the period under review, under-funding is, in many cases, the consequence of non-release of 2014 last-quarter operational grants. The Zambia Public Expenditure Review (2015) highlighted poor efficiency and poor effectiveness in resource use, mostly due to: (i) weaknesses in targeting the right beneficiaries, especially when implementing pro-poor policies; and (ii) ineffectiveness of implementation.
Does the MoE possess enough coordination skills to coordinate with stakeholders?	According to the evaluation of the Joint Assistance Strategy for Zambia (JASZ) 2007–2010, there is little evidence of MoE capacity to effectively coordinate donors. The Ministry of Finance's approach to aid management has been weak and the JASZ is still largely driven by donors. Recently, the Government has been proactive, taking a much stronger role in the development of the new JASZ and the corresponding memorandum of understanding and division of labour. Despite these developments, one can observe that government allocations to education have been increasing while donors' contributions have been fluctuating and, overall, falling, from approximately 13 per cent in 2007 to about 5 per cent in 2012, including project funding.

Drawing on the Capacity Development Results Framework (CDRF) of the World Bank Institute, JICA (2012) has developed a simplified framework to review the planning and management capacity of Zambia's MoE. While referring to the basic concepts of the CDRF, this simplified framework uses the terms relevance, efficiency, and effectiveness in place of the CDRF's capacity factors. That said, its definitions basically follow those of the CDRF. *Table 20* summarizes the main findings of the JICA study, with additional contributions generated by this study.

This evidence suggests that, despite huge investment in education policy and plan development, MESVTEE faces some challenges, particularly when it comes to implementation, and monitoring and evaluation (M&E). According to many stakeholders involved in this review, these gaps are mostly explained by the lack of funding, the weak accountability system and, to some extent, the shortage of qualified staff. It also appears that, as in some other countries, planning is not yet established as a national framework geared at maximizing the effectiveness and efficiency of education service delivery. Instead of being a living document to guide progress towards national education objectives, ESPs have sometimes served only as a resource mobilization instrument to comply with donor requirements.

With regard to M&E, there are two aspects that need to be distinguished in the case of Zambia: (i) the M&E of schools, which is the responsibility of the Standards and Curriculum Directorate (which is responsible for inspections); and (ii) the M&E of ESPs, including the review of planning and implementation process, which is the responsibility of the Directorate of Planning and Information.

The Directorate of Standards and Curriculum is responsible for ensuring the quality of education standards, including the state of school infrastructure, the availability and status of learning and teaching materials, and the qualification and performance of teachers in schools at every level. The amended 1966 Education Act (the new Act of April 2011) provides guidelines for the inspection process, as well as classroom inspection forms to establish that teachers are in line with curriculum and teaching standards. Based on these guidelines, the inspectorate reviews the above quality-related data and information to provide for better planning by MESVTEE.

While the 2010 Education Act requires that an annual inspection report be submitted to the Minister of Education for action, it was reported that these reports are no longer available in any comprehensive form to the Ministry Planning Division, due to staff shortages. However, a one-page summary report is occasionally submitted on a provincial basis to the Planning Division. There are still no plans to address the staffing challenges that have been plaguing the division since the early 2000s. Like the other directorates of the Ministry, the main challenge faced by the Directorate of Standards and Curriculum lies in inadequate funding, especially funding dedicated to inspection activities. This problem needs to be urgently addressed if the quest for quality education is to be rigorously pursued (Beyani, 2013).

As far as ESP M&E is concerned, it was observed that the emphasis is often put on assessing the targets, to the detriment of a proper review of the planning and implementation process, as well as an evaluation of the results and recommendations to improve the next planning cycle. According to Beyani (2013), while the SNDP

has reviewed the implementation of the FNDP and identified shortfalls in its achievement, no analysis has been provided of the challenges faced and the reasons for missing the targets.

However, recent trends suggest that the education sector has taken steps to address this challenge. In fact, an appraisal of NIF III by cooperating partners noted that lessons from the implementation of NIF II have been taken into account to address outstanding issues while relevant actions have been proposed through the sector dialogue process. These issues have been mostly related to the share of total budget devoted to management and administration, the tension between access (the expansion of enrolment) and quality, and the funding of higher education.

Also, with NIF III, the M&E system has been reinforced through the establishment of a common monitoring framework, the education sector Strategic Performance Assessment Framework (PAF), agreed by the Ministry and all major stakeholders, including the country's cooperating partners. The sub-sector reporting and monitoring requirements have been further developed, and annual progress reviews have been instituted. The M&E system has also been enhanced by the adoption of the Medium-Term Expenditure Framework (MTEF) process along with the introduction of annual work plans and budgets (AWPB). The improvement in data collection is viewed as necessary to sustain the utilization of impact monitoring results for evidence-based policy-making and resource allocation.

As part of the NIF III cycle, a mid-term review and a final evaluation were introduced. The appraisal of NIF III has highlighted widespread capacity needs, as a key constraint, not only on effective achievement of the NIF III objectives, but also on effective M&E. The appraisal also revealed the weakness of the risk analysis undertaken as part of NIF III, which, it recommends, should be addressed as part of the Joint Annual Review (JAR).

The JAR of the education sector has been carried out since 1998, as a policy dialogue mechanism geared at assessing the previous year's performance, with the aim of laying the foundation for the next year's planning and budgeting process. While the JAR has been improved over the years, a number of partners mentioned weak follow-up on recommendations from the previous gatherings. For instance, with reference to the 2015 JAR, ZANEC stressed that only 61 per cent of the 2014 JAR recommendations had either been met or were being addressed, with 38 per cent of actions not achieved. ZANEC also raised concern that the implementation of the JAR focused on short-term objectives, while long-term objectives in previous JAR reports had not been addressed at all, with some recommendations reappearing in

successive JAR reports without being addressed or, indeed, discarded (JAR Report, 2015).

Discussion

Strategic planning is necessary to ensure accurate and timely delivery of educational services. It sustains education development efforts by identifying challenges, setting priorities, and focusing on what can realistically be achieved within a given timeframe and with the available resources. Educational strategic planning requires an increasingly strong information base for evidence-based policy formulation and the resulting planning processes, including monitoring and evaluation geared to inform and improve both implementation and subsequent planning phases.

In Zambia, as in many other countries, the need for strategic planning and management is increasing with the need to cope with a dynamic and changing social and economic environment, in order to make the best use of limited resources, particularly in the context of educational decentralization.

The effective, efficient, and relevant implementation of the education planning cycle relies on national capacities in terms of officials' skills and performance, efficacy of the organization (the MoE), and public administration as part of the institutional sphere, as well as the socio-cultural, economic, and political context within which educational programmes and activities are implemented (De Grauwe and Hite, 2008).

The literature is replete with cases of weak national capacity for education planning and management, particularly among African countries. A study of Ethiopia, for instance, highlighted four factors affecting the capacities of educational planners and managers. These challenges, which have been mentioned in other country studies (Benin, DRC, etc.), include weak human resource management, inadequate organizational arrangements, a poor technical environment, and insufficient motivation of planners and managers (Oulai et al., 2011).

While most countries have been embarked in national capacity development programmes in recent years, the results have been disappointing in many cases, particularly in the least developed countries, where these efforts have failed to achieve the expected long-term impact. An international expert meeting, organized by UNESCO in 2008, identified a number of reasons for these failures, as well as a number of ways to overcome common constraints encountered in the area of capacity development in educational planning and management (De Grauwe and Hite, 2008).

These expert discussions showed that most capacity development initiatives were limited to the individual level and were usually in the form of training. However, training will only have a long-term positive impact if participants: (i) are assigned tasks that match the training received; (ii) are offered an enabling working environment; (iii) receive adequate incentives; (iv) are well managed and supported; and (v) form a sufficient critical mass to make a meaningful difference in national capacities for educational planning and management. This suggests that individual capacity alone is not sufficient to enhance performance. Organizational and institutional issues must also be addressed. Hence, capacity development should first induce organizational change, which requires strong government commitment and change-oriented leadership. Sustainable improvement of organizational performance entails the establishment of an adequate ministerial structure and relationship (lines of communication: bottom-up/top-down) as well as strong monitoring and accountability mechanisms for both internal (within the organization) and external (towards partners and civil society) effectiveness. The institutional and contextual arrangements, including the enforcement of laws, rules, and regulations, are also of critical importance for sustainable national capacity development.

It was also found that many capacity development initiatives are donor-driven and, in general, do not survive beyond the end of external funding. Lessons from various experiences suggest that capacity development should be addressed as a long-term undertaking, with strong strategic vision and commitment from the government to create conditions for positive change, in terms of individual, organizational, and institutional national capacities.

RECOMMENDATIONS

- Conduct a capacity needs assessment in education planning and management, addressing the main capacity dimensions, i.e. individual, organizational, institutional, and knowledge-based capacities.
- Based on the findings from the needs assessment, formulate a comprehensive capacity development strategy for education planning and management, including all relevant levels of education governance (central, provincial, district, and local).
- Enhance the human resource management function of the Planning Directorate, by taking relevant measures to: (i) ensure the enforcement of the guidelines for recruitment so that candidates with suitable profiles are appointed to the posts of education planners and managers; (ii) establish more systematic mechanisms for staff training and professional development of planners and managers; (iii) address issues of staff turnover; (iv) address issues of low salary to raise staff motivation; (v) develop leadership and management capacity of heads of offices

to support staff and enhance their morale; and (vi) provide opportunities for planners and managers to meet regularly and exchange their experiences in order to generate knowledge and innovations to address emerging challenges in their areas of work.

- Further promote the culture of planning, M&E, and accountability within the education system. It has to sensitize decision-makers, partners, and users of education services as to the critical importance of producing reliable data, and effectively implement the educational planning cycle (analysis, strategic planning, implementation, and M&E).

References

De Grauwe, A. 2005. 'Improving the quality of education through school-based management: Learning from international experiences'. In: *International Review of Education, 51*(4), 269–287.

De Grauwe, A. 2011. *Strengthening local actors: The path to decentralizing education. Kenya, Lesotho, Uganda*. Retrieved from: http://www.iiep.unesco.org/sites/default/files/211046e.pdf.

De Grauwe, A.; Hite, S. 2008. *Capacity development in educational planning and management: Learning from successes and failures. Rethinking capacity development*. Paris: IIEP-UNESCO. Retrieved from: :http://unesdoc.unesco.org/images/0018/001865/186570E.pdf.

De Grauwe, A. ; Lugaz, C. 2010. *Schooling and decentralisation:. Patterns and policy implications in Francophone West Africa*. Paris: IIEP-UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0014/001470/147099e.pdf .

Florestal, K.; Cooper, R. 1997. *Decentralization of education: Legal issues*. World Bank: Directions in Development. Retrieved from: http://www1.worldbank.org/publicsector/decentralization/Feb2004Course/Background%20materials/Florestal.pdf.

John, A.; McKenzie, P. 2000. 'School governance: Research on educational and management issues. In: *International Education Journal, 1*(3). Retrieved from: http://ehlt.flinders.edu.au/education/iej/articles/v1n3/ainley/ainley.pdf .

MESVTEE (Ministry of Education, Science, Vocational Training, and Early Education). 2015. *Joint Annual Review Report*. July 2015.

Ministry of Education. 1996. *Educating Our Future: National Policy on Education*. Lusaka: Zambia Education Publishing House.

Ministry of Education. 2003. *Ministry of Education Strategic Plan: 2003–2007*. Lusaka: MoE.

Ministry of Education. 2007. *Education Sector National Implementation Framework 2008–2010: Implementing the Fifth National Development Plan*. Lusaka: MoE.

Ministry of Education. 2010. *Ministry of Education Sector Devolution Plan*. Lusaka: MoE.

Ministry of Education; SNV (Netherlands Development Organisation). 2008. *Governance in education: A handbook for planning and decision-making*. Education Boards Services. Lusaka: MoE.

Ministry of Education; SNV. 2009. *Report of the investigative study into the practices, processes, and operational environment of selected district education boards in Central, Lusaka, Northern, North-Western and Western Provinces*. Lusaka: Critical Consultancy and Management Skills.

Mukwena, R. 2001. 'Situating decentralisation in Zambia in a political context'. In: *African Training and Research Centre for Administration for Development, 12*(3), 7–33. Retrieved from: http://unpan1.un.org/intradoc/groups/public/documents/CAFRAD/UNPAN017692.pdf

Naidoo, J. P. 2002. 'Educational decentralisation in sub-Saharan Africa: Espoused theories and theories in use. Paper presented at the CIES Annual Conference. Retrieved from: http://eric.ed.gov/?id=ED472263.

Naidoo, J.P.; Kong, P. 2003. 'Improving education management systems in the context of decentralization in Africa'. Background paper for ADEA study, The Challenge of Learning: Improving the Quality of Basic Education.

Namukas, I. and Buye, R. 2009). 'Decentralization and education in Uganda'. In: *Comparative and International Education*, 36(1). Retrieved from: http://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1024&context=cie-eci.

Ndegwa, S. N. 2002. *Decentralization in Africa: A stocktaking survey*. Africa Region Working Paper Series, 40, November 2002. Retrieved from: http://www.worldbank.org/afr/wps/wp40.pdf.

OECD. 2008. The Paris Declaration on Aid Effectiveness (2005) and the Accra Agenda for Action (2008). Retrieved from: http://www.oecd.org/dac/effectiveness/34428351.pdf.

Oulai, D., Lugaz C., Minas, A., and Teklehaimanot H. 2011. *Analysis of capacity development in educational planning and management in Ethiopia: Rethinking capacity development*. Paris: IIEP-UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0019/001909/190955e.pdf .

Kayabwe, S. 2014. *Successful decentralization: The roles and challenges of DEOs in Uganda*. Paris: IIEP-UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0022/002282/228293E.pdf.

Sikayile, A. 2011. *Educational decentralization in Zambia: An analysis of policy and practice. A Study of Chongwe and Solwezi District Education Boards*. University of Oslo. Retrieved from: https://www.duo.uio.no/bitstream/handle/10852/35768/Sikayile.pdf?sequence=1.

UIS. 2011. *Financing education in sub-Saharan Africa. Meeting the challenges of expansion, equity and quality*. UNESCO. Retrieved from: http://www.uis.unesco.org/Library/Documents/Finance_EN_web.pdf.

UNESCO. 2005. *Educational policies and strategies: Decentralisation in education: National policies and practices*. Paris: UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0014/001412/141221e.pdf .

USAID. 2007. 'Identifying the impact of educational decentralisation on the quality of education. In: D. Winkler and B. Yeo (Eds), *Equip 2: Working papers*. Retrieved from: http://www.equip123.net/docs/e2-DecentQuality_WP.pdf.

USAID. 2009. Democratic decentralisation programming handbook. Washington, DC: USAID. Retrieved from: http://capacity4dev.ec.europa.eu/public-pub.sector-reform-decentralisation/document/usaid-2009-democratic-decentralisation-programming-handbook.

Winkler, D.; Yeo, B. 2007. *Identifying the impact of educational decentralisation on the quality of education*. Working Paper on Education Quality Improvement Programme (EQUIP2). Retrieved from: http://www.equip123.net/docs/e2-DecentQuality_WP.pdf.

World Bank. 2007. *What is school based management?* Education, Human Development Network. Washington DC: World Bank. Retrieved from: http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079934475/547667-1145313948551/what_is_SBM.pdf.

World Bank. 2015. 'Zambia public expenditure review'. Draft Report. May 2015.

3.2 Teacher policies and development

This section addresses one of five priority domains (teacher policies and development) highlighted by Ministry officials at the outset of the review. It provides an analysis of the policy issues that the country currently faces in this domain, as well as a set of related policy recommendations, most of them resulting from discussions with government representatives and other relevant educational stakeholders in Zambia.

These policy issues can only be understood in the context of teacher education and development in Zambia.

Current context of teacher education and policies in Zambia

With total staff numbers exceeding 93,000, teachers constitute the majority of Zambia's civil servants, and their salaries represent the largest component of state expenditure on education. This reality means that issues concerning teachers and teaching must be a key area of focus in education reform in Zambia, particularly as the country has experienced an acute shortage of qualified teachers for many years. This shortage is due to a combination of factors, including the low capacity of teacher training institutions, high attrition rates, and the impact of the HIV/AIDS epidemic (UNESCO, 2015).

In light of these teacher-related issues and the imperative to achieve education quality targets, MESVTEE has, under NIF III (2011–2015), implemented a number of policy actions to ensure quantitative and qualitative improvement in teacher supply and management.

The primary providers of teacher training and professional development programmes in Zambia are teacher training colleges, universities (public and private), and some non-governmental organizations (NGOs). Of the 14 public colleges of education, eight focus on primary school level (Grades 1–7), two on junior secondary (Grades 8–9), and two on senior secondary (Grades 10–12), while two provide in-service training. Two colleges (David Livingstone and Kitwe) additionally offer training for ECCDE educators while two technical and vocational institutions, Luanshya TVTC and Evelyn Hone College of Applied Arts and Commerce, provide teacher training at secondary school level. In addition to public colleges, the number of private teacher training programmes has also increased in recent years. Entry requirements for primary teacher training include a Grade 12 certificate with at least three credits and two passes, including at least a pass mark in English and mathematics. Training for secondary teachers can take the form of a three-year diploma or a four-year degree.

In addition to this initial training, continuous professional development (CPD) programmes for teachers and education leaders have become central to the general delivery of education, as stated in a recent EFA report on Zambia (MESVTEE, 2014*a*: 20).

CPD programmes provide opportunities for teachers to upgrade their qualifications, support curriculum development, and advance their careers. While some have been conducted formally through registration and systematic study, others have been informal (Perraton, 2010). International and national surveys show that CPD for teachers is important to the overall quality of education. Improving quality requires a pedagogical shift to recognizing teachers as 'facilitators of learning' rather than as 'transmitters of facts'. Moreover, good quality teaching and classroom practice are indispensable to the Post-2015 development agenda (Habler, Hennessy, Cross, Chileshe, and Machiko, 2015).

In highlighting the value of CPD programmes, *Educating Our Future* (Government of Zambia, 1996) argues that strategic approaches to in-service teacher education should ensure that such programmes are demand driven, respond to identified needs, focus on school needs, are based in schools or resource centres, are cost-effective so that large numbers of teachers have opportunities for learning, and include studies on subject content as well as methodologies, use of materials, and management in classrooms. In keeping with this approach, the Government developed the *Teaching*

Skills Book (based on lesson study experience), to help teachers develop learner-centred lessons: 'It is envisaged that, in the long run, Zambia will be in the position to define its own learner-centred teaching and learning through our effort for developing better lessons for the pupils' (Ministry of Education, 2009: viii).

Another avenue for providing teacher professional development programmes within the Zambian education system is through the teacher resource centres. According to Fairhurst *et al.* (1999), the underlying idea is that these centres encourage professional interaction and a certain level of curriculum development and material production, which in turn result in improvement in the quality of teaching. Gibbs and Kazilimani (1999) note that Zambia's teacher resource centres are intended to: (i) establish a sustainable and well-managed decentralized system for in-service teacher education, and (ii) provide the necessary resources to schools while training head teachers and teachers in methods of resourcing and better management of schools.

Teacher training centres have been established at different levels of the education system and are thus operational at provincial, regional, and district levels. As Mulkeen (2010) reports, Zambia's hierarchy of CPD support structures are provided at three levels: the school, zonal centres, and district centres. At the school level, each school has an in-service training (INSET) coordinator who works with the head teacher to identify training needs within the school. At the zone (i.e. cluster of schools) level, there is a zonal resource centre, usually a classroom in a school, and a zone INSET coordinator, usually a teacher who took the post as a voluntary part-time activity. These local centres house some resource materials, and serve as a centre for training activities and meetings. At the district level, district resource centres (DRCs), are often equipped with libraries, photocopying facilities, computers, printers, and sometimes internet access. Each DRC has a full-time district INSET coordinator. Mulkeen (2010) notes that the DRC also serves as 'a local hub for information from the Ministry of Education about the latest initiatives and directives' and stores 'copies of materials that should be available to schools' (p. 99).

With regard to the improvement of teacher quality in Zambia, the National Implementation Framework III (2011–2015) lists four key objectives: (i) to improve the quality and relevance of teacher education; (ii) to increase output of pre-service teacher education in order to achieve the MDGs and EFA goals; (iii) to improve the efficiency and effectiveness of college education; and (iv) to improve equity in teacher training.

To achieve these objectives, NIF III (MESVTEE, 2015: 38) proposes that the following key issues be addressed:

a. Promote excellence in the offer of diverse teacher education and training programmes focused on national development.
b. Upgrade teacher education institutions and qualifications.
c. Strengthen systems for continuous professional development, management, and support.
d. Establish a teaching council.
e. Provide appropriate management training for teachers taking up management positions.
f. Harmonize innovations and practices in both schools and colleges of education.
g. Expand infrastructure in colleges of education.
h. Construct teacher education colleges.
i. Facilitate greater and more effective involvement of other key stakeholders in teacher supply.
j. Promote alternative methods of teacher training.
k. Strengthen good governance through an efficient and effective system of administration and financial management.
l. Streamline training of teachers to match subject teacher requirements in schools.
m. Incorporate elements of special education curriculum in all colleges.
n. Expand bursaries for vulnerable learners.
o. Provide specialized services for learners with special educational needs.
p. Provide guidance and counselling services.
q. Integrate cross cutting issues (HIV and AIDS, gender, life skills, etc.) into the teacher training curriculum.

Achieving the objectives specified in the framework has been an ongoing challenge that requires a number of key policy issues to be addressed. In the next section, these policy issues are noted and a number of key recommendations are made.

Policy issue 1: Low training capacity and inadequate teacher qualifications

While the majority of teachers in Zambia have some teaching qualifications, there remain key challenges in: (i) improving teacher content knowledge and pedagogical skills, and (ii) addressing the acute shortage in the areas of mathematics and sciences.

Evidence

During the review mission, shortage of quality teachers has been mentioned by almost all stakeholders consulted. The situation is exacerbated by various factors, including poor working conditions for teachers, limited institutional capacity, and

the insufficient teaching and learning skills of teachers (Beyani, 2013). Moreover, since the launch of free primary education in 2002, many primary school teachers are overwhelmed by class sizes of around 60–70 pupils, which has an impact on learning outcomes, especially in mathematics and science (Chanda, 2008).

To improve the overall qualification profile of teachers, MESVTEE upgraded all teacher qualifications offered at colleges of education from two-year certificate programmes to three-year diploma programmes. Notwithstanding these changes, the Ministry notes that the 'qualified human resources, infrastructure and teaching and learning materials still remain the main challenges in all colleges of education' (MoE, 2010: 36). According to MESVTEE, teachers can obtain one of three qualifications: (i) the teaching certificate, which is a requirement at primary level; (ii) the teaching diploma, which is required to teach at junior secondary level; and (iii) a teaching degree – either at bachelor's or master's level – which is a requirement to teach in senior secondary education (Grades 10–12).

Of the 73,549 teachers at basic school level (Grades 1–9) only 7 per cent (5,207) report having no professional qualification, with the majority in possession of a teaching certificate (57 per cent) or teaching diploma (26 per cent) (MESVTEE, 2014*a*). At secondary school level (Grades 10–12), only 0.4 per cent (74) of 19,615 teachers reported having no professional qualification. Only 12 per cent of teachers possessed the required qualification (a bachelor's degree), with 61 per cent reporting that they had an education diploma (MESVTEE, 2014*a*). The MoE also highlights the acute shortage of secondary school mathematics and science teachers, noting that not enough new teachers are graduating to address this shortage. It was in response to this shortage that the 'government has constructed Mulakupikwa University, targeting increasing output of teachers in mathematics, science and other practical subjects' (MoE, 2010: 36).

The upgrading of teacher qualifications was initially aimed at primary-trained teachers who taught in secondary schools. They took three-year courses, which combined residential training and self-study modules. The upgrading process impacted on teacher supply. Mulkeen notes an annual output of 4,300 newly trained primary teachers from pre-service training, but annual losses of 1,100 primary teachers upgrading to secondary level (Mulkeen, 2010: 96). While the process of upgrading is important, the need to balance supply and demand should also be addressed. Silwimba (2006) lists a number of issues that need to be addressed to achieve this balance in practice, including: (i) a number of teachers pursuing further studies, and not on active teaching duty; (ii) many teachers, though on the rolls, unable to teach due to poor health; (iii) a number of new teachers not taking up teaching positions; and (iv) the inherent problems of teacher distribution between

overstaffed urban schools and understaffed rural schools distorting the demand-supply equation (understaffing in rural schools is primarily due to unsatisfactory life and working conditions in rural areas as demonstrated by the absence of basic amenities such as power, potable drinking water, transport, etc.).

Another key initiative undertaken by MESVTEE (2013) was the introduction of a new curriculum, both in schools and at teacher training institutions (TTIs). The focus on revising the curriculum for TTIs was intended to ensure that student teachers received relevant training that would better prepare them to address the specific contexts that define learning and teaching across the schooling sector in Zambia (Teacher Development Unit, 2015). As in June 2015, curriculum reform within teacher training institutions was still being implemented.

Discussion

In the recent past, strategic interventions with partners have been initiated to remedy the shortage of quality teachers. For instance, the non-profit Flemish Association for Development Cooperation and Technical Assistance (VVOB Zambia), in collaboration with MESVTEE, launched the Teacher Training Support Programme in 2008 to improve the quality of education through teacher training and development. Twelve teacher training institutes were operational partners in the programme, which covered four main areas: continuing professional development, distance learning, ICT in education, and community schools (VVOB, 2013).

In 2014, the Government of Zambia signed a memorandum of understanding with DMI Saint Eugene University in Lusaka to upgrade the qualifications of teachers in mathematics and science through a fast-track distance-learning programme. According to MESVTEE, 2,000 teachers will be trained during the first phase of the programme. Half of these teachers will be upgraded from certificate to diploma, while the remainder will upgrade from diploma to degree qualifications. The programme is expected to take less than four years and offers residential provision during school vacations (Chiale, 2014). MESVTEE is sponsoring the programme, which includes some mathematics students from the University of Zambia.

The problem of teacher under-qualification is more acute for community schools. DeStefano (2006) notes that teachers in community schools have less formal education and less teaching experience, compared to their public school counterparts. This, DeStefano argues, is due to the different employment requirements for teaching in the two types of school. Public school teachers are required to have a primary teacher certification, while teachers in community schools are only expected to have completed senior secondary school through to Grade 12. Similarly, Sianjibu-Miyato

(2013) notes that 90 per cent of teachers in community schools are untrained (most of them are volunteers) and that the majority of them are not on the government payroll. Furthermore, most community schools do not have enough resources to cover day-to-day running costs. This situation has significant consequences for teacher professional development programmes. While teachers in public schools already possess a primary certificate, and are thus eligible to upgrade to a diploma or bachelor's degree, teachers in community schools still need to acquire a basic primary certificate.

Community schools were started around 15 years ago by rural parents who felt that their children should not walk to public schools located far away from their villages. There are now some 4,000 such schools. Community school teachers generally have at least six years of primary school education. In some areas, parents provide them with a hut to live in and a bag or two of maize meal per month (Vilsack, 2014). Vilsack (2014) further notes that:

> *'The volunteer teachers are friends and neighbours, young people who have potential but no access to further education. They have a vested interest in teaching the village kids to read. With the help of weekend trainings, watching experienced teachers via cell phone videos, and coaching by head teachers, these novice teachers are improving. Some of them will earn the credentials that will qualify them for salaried positions'* (para. 8).

The African Revival, an international NGO whose goal is to improve the quality of education in Zambia, launched the Community Teacher Training Programme in the Kalomo District of the Southern Province. Working with the district education board, African Revival singled out the lack of teachers as a key reason for poor performance at schools in the district. Twenty community school teachers from Kalomo have since been sponsored by the NGO to attain a diploma of education within three years. The group completed the first year of the programme in spring 2015. The aim is to improve the quality of teaching at disadvantaged schools in Zambia (African Revival, 2015).

In 2010, USAID committed to improving the reading skills of 100 million children in developing countries by 2015. For Zambia, the goal was 1 million. USAID has assisted the Ministry of Education in developing in-service training for community school teachers using a five-step process for teaching reading. Some community schools are now doing better than public schools. Community school teachers seem to spend more time with pupils, and are more effective and motivated in the classroom.

Another key factor concerning teacher qualifications pertains to the effective implementation, both at school and TTI level, of the revised curriculum. Specifically,

at the level of TTIs, delays in the development of the new curriculum have resulted in the continued use of training programmes based on the old curriculum at the same time as the new curriculum was being implemented in schools (Teacher Development Unit, 2015). The result of these delays has been that newly trained teachers are even less well prepared as they enter the first years of their teaching careers. This matter, however, has been identified as a critical issue to address, and plans are underway to implement the new curriculum in all teacher training institutions in the near future (Teacher Development Unit, 2015).

RECOMMENDATIONS

- Setup an integrated implementation plan with a road map to expand and improve the accessibility and quality of teacher training programmes offered in response to the newly revised curriculum for pre-service and in-service for teacher trainees and teacher trainers. Institutions involved in teacher education should be properly consulted on the implementation process.
- Improve the capacity of teacher training institutions to absorb more trainees, focusing on both facilities and the knowledge and skills of lecturers.
- Implement targeted recruitment strategies to enrol higher numbers of students onto mathematics, science, and technology teacher education programmes.
- Provide more opportunities for training teachers from community schools, including specialized programmes that reflect the unique needs of these teachers.

Policy Issue 2: Inadequate continuous professional development programmes

Most of the stakeholders involved in this review mentioned that the current professional development programmes are uncoordinated, unsustainable, and do not adequately address the specific needs of teachers

Evidence

Mulkeen (2010) argues that CPD opportunities for in-service teachers play 'an important role in improving teacher quality by providing opportunities to refresh knowledge, to update on new curricula, and to reflect on professional experiences' (p. 96). In Zambia, teachers' continuing professional development is a vital part of the country's attempts to guarantee quality education for all, as reflected in the 2011 Education Act. Mubanga (2014) notes that two types of in-service education and training programmes have been offered in Zambia: (i) long-term up-grading/ professional courses for school teachers offered by the National In-service Training

College (NISTCOL), the Zambia Institute of Special Education (ZAMISE), and the University of Zambia; and (ii) short-term INSET or capacity-building CPD courses mostly based in schools or in teacher resource centres. However, MESVTEE notes that these programmes are facing a number of challenges, such as inadequate reference materials and infrastructure, under-resourced facilities, and a lack of integration of CPD and ICT in the teacher education curriculum (MESVTEE, 2010: 37).

To address these issues, MESVTEE (2010) is reviewing current CPD mechanisms to ensure a continued supply of appropriately qualified lecturers through college staff development programmes. A key challenge concerns the sustainability of this system, since it depends on donors and NGOs running short, one-off courses and workshops. Consequently, some teachers are unable to implement the methods they have studied when they return to classrooms. Also, as Banda notes, 'It is not surprising to find a teacher trying to propagate a certain way of planning a lesson and they associate it with the cooperating partners instead of focusing it on the general pedagogy of teaching and its context' (Banda, 2014: 1).

Mubanga (2014) notes that efforts to improve teachers' professional qualifications and competence take the form of pre-service training provided through teacher training colleges and in-service training through school-based initiatives, while simultaneously efforts are underway to improve the teaching and learning environment through provision of relevant materials and equipment, and the revival of institutional infrastructure. However, Mubanga (2014) cautions that a failure to implement the education reforms in full could compromise the quality of teacher education programmes, highlighting issues such as the lack of a comprehensive curriculum review in teacher training and the nature of training programmes currently being offered.

Discussion

A background paper prepared for the Oslo Summit on Education for Development held in July 2015 suggests that under-investment in professional development programmes is associated with poor student results. Specifically, the key message from the summit was that 'investing in teachers, their preparation, support mechanisms, and the means of delivery in the classrooms, is investing in learning. It is a prerequisite to allow the transformative power of education to occur' (UNESCO, 2015*b*: 14).

However, there is little data available from evaluations of CPD programmes to help us understand their impact on teacher knowledge and behaviour. Moreover, Mataka notes that there are no 'systematic, well established and effective strategies of finding

out the views of teachers towards the INSET activities in basic schools' (Mataka, 2010: 17).

In a recent synthesis report on *In-Service Teacher Education in sub-Saharan Africa*, Ibn Junaid and Maka (2014) highlight the specific challenges that impact on continuing professional development (CPD) programmes. These are :

- CPD programmes that do not resonate with teachers' career progression are ineffective and unattractive to teachers.

- CPD programmes for certification do not strengthen the academic and pedagogical skills required for employment (those acquired during pre-service training). They are also expensive and ineffective.

- The one-off training workshop renders teachers mere recipients of knowledge: 'The prevailing mixture of certified and uncertified teachers in the education systems of these countries calls for differentiated training programmes based on established training needs of the different cohorts of teachers' (Ibn Junaid and Maka, 2014: 57).

Mataka lists a number of challenges arising from teachers' evaluation of CPD policies and activities at selected schools in Lusaka. A school manager explained that his school regarded CPD programmes as refresher courses for teachers, while a colleague noted that there was no CPD policy for schools. The study suggested that poor communication of CPD by school managers contributed to the negative attitudes teachers had towards it. Some said it was a waste of time considering that teaching was their main purpose at school. Another issue concerned the capacity and skills of management to effectively integrate CPD into the school curriculum. Since such duties have been decentralized, school managers are now responsible for informing teachers about such programmes.

Some teachers demanded payment for attending CPD activities since these sessions did not always lead to promotion or salary increments. Others were reluctant to participate in CPD because they regarded it as an external control mechanism that could highlight their shortcomings. There were issues too about the quality of the content of these courses and their impact on teaching and learning. The SACMEQ III survey found that only 33.4 per cent of Zambian teachers felt the content of professional development courses had an impact on their instructional capacity in the classroom.

These issues are exacerbated by the variable nature of promotion policies and practices across the system, and the fact that promotion of teachers in Zambia is often based primarily on academic qualifications with very little consideration given to work performance. Discussions with education stakeholders suggested that some promotion practices have been unfair, due to nepotism and corruption. The education minister in 2013 commented: 'In the past, thousands [of teachers] were selected unprofessionally and so many crooks infiltrated the well-meaning restructuring the ministry was doing. People were promoted using a system of psychology and this has to stop' (*Lusaka Voice*, 2013, para. 6). The minister noted that appointments and promotions had also been based on political connections and emphasized that 'there is need to rid the system of bad practices of nepotism, tribalism and perceived corruption so that the best teachers are filtered through the system' (para. 8).

RECOMMENDATIONS

- Institutionalize a system to improve coordination and harmonization among providers and evaluators of teacher training programmes in order to successfully and effectively improve the teaching and learning processes, as well as student learning outcomes.
- Prioritize the improvement of teacher resource centres at the different levels of the system to support effective teacher development programmes, and restructure continuing professional development programme to reflect the reality of classroom conditions.
- Further develop capacities at national and sub-national levels for monitoring and evaluation of teaching and learning processes, through improved teaching practice opportunities in pre-service programmes and in-service CPD.
- Strengthen monitoring and evaluation of CPD programmes to better understand its impact on teachers' performance and behaviour, as well as on the quality of education.

Policy Issue 3: Inadequate policies for remuneration and career opportunities

Currently, career pathways for teachers to advance within the education sector are limited, while remuneration packages are perceived to be extremely low, resulting in high rates of attrition and active teachers resorting to other sources of income.

Evidence

Mulkeen (2010) notes that Zambia allocates near 70 per cent of its annual education budget to basic education. In 2007, the starting salary for primary school teachers in Zambia was US $3,292 per annum, four times per capita GDP. Primary teachers also received other allowances, according to qualifications and marital status. For instance, subsistence allowance was US $61–65 per month (about 22 per cent of pay). While these salaries seemed high, they were in fact equivalent to US $17 per day when converted into purchasing power parity (PPP). Mulkeen writes: 'The teachers unions, using data from the central statistics office, showed that the starting salary of a primary teacher was roughly two-thirds of the cost of the basic needs basket for the family' (Mulkeen, 2010: 158).

The starting salary for lower secondary school teachers was 15 per cent higher than that for primary teachers, and the starting salary for upper secondary school teachers was 52 per cent higher than that for primary teachers. Yet, in many cases, primary school teachers have heavier workloads and much larger classes. Compared to jobs in the private sector, teaching is seen as less attractive and certainly pays less. Teacher attrition rates are unsurprisingly high, averaging 9 per cent in 2013 (Zambia EFA 2015 Review, 2014). Mulkeen (2010) argues that this is partly a reflection of alternative opportunities in the labour market, and thus it should be expected that attrition rates vary for different types of teachers.

Available data on Anglophone Africa indicate that attrition is higher among secondary school teachers educated to a higher level, than it is for primary teachers. Attrition is also higher among mathematics and science teachers in sub-Saharan Africa (Mulkeen, 2010). Moonga (2010) observes that low salaries drive Zambian mathematics and science teachers to other countries in the region. While they earn around US $400 per month, with an extra US $100 for housing and other allowances, in Zambia, in Botswana they can earn US $1,500 per month.

Bennell and Akyeampong (2007) use the concept of 'wastage' to define the category of trained teachers who do not enter the teaching profession. The authors argue that the high incidence of study leave, and high mortality rates in countries such as Zambia, which have been badly affected by the AIDS epidemic, are major sources of wastage. However, the main challenge in terms of wastage is posed by the relatively high number of graduates who simply choose not to join the teaching profession. While accurate data are not readily available, Mulkeen notes that, since 2005, the University of Zambia has produced more than 400 graduate teachers each year (431 in 2006). Yet only 1,017 teachers with degrees were working in the country's schools in 2005. Mulkeen (2010) thus concludes that most graduates were either not entering the teaching profession or leaving it shortly after joining (Mulkeen, 2010: 35).

The 2005 IMF *Zambia: Poverty Reduction Strategy Paper Progress Report* noted that of the 9,000 teaching vacancies available in 2003, 8,500 were in basic education and 500 in high schools. Nonetheless, the education sector could not employ teachers who had graduated in 2002 and 2003 because of the wage bill ceiling recommended by the World Bank as part of its structural adjustment programmes (SAPs). As a consequence, only 1,400 were recruited in April 2004 to fill existing vacancies. The IMF also reported that 'high attrition resulting from deaths and brain drain also aggravated the high pupil-teacher ratios in schools' (IMF, 2005: 41). As James-Traoure, Finger, Ruland, and Savariaud (2004) argue:

> *'Teacher attrition due to HIV/AIDS leads to deteriorating educational systems through stress on the human-resource base, worsening ratios of educators to students, loss of experienced teachers, increased demands on staff health benefits, and pressure on educator training colleges to keep pace with the demand for new teachers'* (p. 10).

In a review entitled *Teacher Mobility, Gender and Status I,* Sinyolo (2008) found that AIDS-related deaths contributed to high attrition rates in Zambia and noted that 'The best way of reducing teacher attrition would be to address its root causes, particularly HIV/AIDS, low salaries and poor working conditions' (p. 10). Moonga (2010) reports that 'Zambia's education ministry has in the past two years deployed over 20,000 teachers across the country to replace those who have left for greener pastures or died'.

In a study of teacher motivation in 12 sub-Saharan Africa countries, including Zambia, Bennell and Akyeampong (2007) report that the low resignation rates among teachers were not due to job satisfaction, but because of fewer opportunities for alternative employment. The authors note that 'Low attrition in the context of pervasive teacher de-motivation only tends to make matters worse because dissatisfied teachers are unable to leave' (p. 49). High rates of teacher transfers also reflect job dissatisfaction and could affect the quality of learning. Similarly, teachers who are unable to transfer due to poor working and living conditions may under-perform at work.

This challenge was highlighted in the MoE's *Educating Our Future* document (MoE, 1996):

> *'The present structure encompasses relatively few promotion posts. As a result, many teachers find that if they are to forward their own interests, they must leave classroom teaching and seek a management or similar post. This leads to the loss from teaching of several excellent teachers, and the frustration of those who fail to secure a new post. This problem would not arise if promotion paths within the teaching channel allowed a teacher's salary to progress to the level of management salaries, or even beyond'* (p. 121).

In practice, however, as Beyani (2013) notes, policies and procedures for employment, staff recruitment, and general human resources operations in the public sector are guided by the Public Service Commission of Zambia. Highlighting the Ministry's commitment to improving teacher quality in Zambia, the National Implementation Framework (MoE, 2010) argues for:

> *'Improvement of the quality of teacher management that in turn entails the establishment of an effective oversight body on quality control and quantitative improvements in teacher supply, which will be complemented by an effective Performance Management System that would monitor the performance of teachers at different levels, both in schools and teacher training institutions'* (p. 10).

Similarly, based on an interview with Ministry's officials, Beyani (2013) reports that the human resources department of the MoE is committed to ensuring that it: (i) recruits, retains, and upgrades the performance levels of its employees; (ii) defines clear career pathways and provides guidance and policy direction on issues of career development and management; and (iii) deploys adequate human resources at all levels as ministerial functions are decentralized. However, Beyani also notes that there are no transparent performance-based criteria to guide staff promotion, especially of directors and permanent secretaries. He argues that the commitment to fair promotion remains largely theoretical, resulting in 'capacity-building challenges, including difficulty in maintaining quality delivery of education services' (Benyani, 2013: 78)

The impact of this 'theoretical commitment' on teacher remuneration and retention is evident in the current system for promoting staff and recognizing improvements in qualifications. The key challenge highlighted during our interviews was the disjuncture between promotion processes, on the one hand, and teacher qualifications requirements and the current staffing structure, on the other. As one interviewee reported:

> *'The policy and approach of the Ministry is to update qualifications of all teachers. The challenge is that the upgrading of qualifications cannot be mapped on to the current qualifications establishment as the current process only requires and/or recognises certificates at primary school level and thus does not accommodate staff with diplomas or degrees. So a person in a primary school who gets upgraded to a diploma or degree has to move to a secondary school to get the salary increment, but most teachers are not equipped to teach at a secondary school as they only have a primary qualification only'* (Interviewee 1, June 2015).

The key issue is that the current salary scales within the school sector do not accommodate the higher qualifications teachers achieve. Moreover, interviewees reported that while a process exists by which staff can apply for a higher salary to reflect their improved qualifications, i.e. by applying to the permanent secretary, generally there is limited follow-up, if any official response, to applications submitted, which corroborates Beyani's (2013) point that this process is merely theoretical. To further underscore this point, interviewees indicated that they were all still at the entry-level grade even though many of them had been in the system for between 15 and 20 years and had applied for upgrading. It was also reported that a similar situation affected academic staff at teacher training institutions, although it was noted that the new minimum requirement for all lecturers is a first degree and no longer a diploma.

Discussion

Teacher remuneration is the major cost driver in education. From a policy perspective, remuneration packages need to be attractive enough to recruit, retain, and motivate good teachers. However, they are designed within the wider constraints of public funding.

Mulkeen and Crowe-Taft (2010) identify two categories of teachers likely to leave the teaching profession voluntarily: those with high qualifications and skills attractive in the labour market, and those who are unqualified, without formal employment contracts, and living in disadvantaged areas.

At South End School in Lusaka, which had around 600 pupils in 2010, Moonga reports that at least five teachers were required to teach mathematics and at least five to teach science, yet they were only able to recruit two for each subject. The shortage of teachers is so acute that one rural primary school employed a teacher who had only completed Grade 7. 'Low pass rates in science and mathematics are evidence of how the shortage is affecting the quality of education', writes Moonga, who also notes that large numbers of trainee teachers are not obliged to teach in public schools after completing their studies, even though they receive government bursary support for their training (Monga, 2010). Low pay aside, teachers are also demotivated and lack the basic equipment they need to teach. The head teacher of South End School lamented:

> *'The education system in Zambia, they put up schools where they have not provided the necessary equipment to make a teacher of science enjoy his work. So you find that this is part of the frustration which is there. As they upgrade these basic schools, they should upgrade the equipment, the science labs and all that'* (Moonga, 2010: para. 23).

Increases in salaries have not kept pace with the upgrading of qualifications. Newly graduated teachers earn higher salaries than serving ones, who have longer experience and improved qualifications, yet often wait many years to receive pay increments.

> *'At the moment, the Ministry of Education, Science, Vocational Training and Early Education and the Teaching Service Commission only consider upgrading or re-assessing a serving teacher with a new qualification, once a vacancy is created. This only happens when, for instance, a mathematics teacher with a degree retires, resigns, gets dismissed, or dies'* (Kambilima, 2015, para. 9).

Rural schools in Zambia also tend to have a higher attrition rate than those in towns. 'The rate of attrition of teachers from community schools, where teachers are very poorly paid, employed at the discretion of the community and are often unqualified, have a much higher rate of turnover than teachers in government schools,' report Mulkeen and Crowe-Taft (2010: 27). Inter-school migration, involving teachers moving away from remote areas, also adds to the loss of teachers in those locations, though, technically, this is not attrition.

UNESCO Institute for Statistics' 2015 data on the global teacher shortage indicated that 25.8 million school teachers would be required to provide every child with primary education by 2030. This total includes the creation of 3.2 million new posts and the replacement of 22.6 million teachers expected to leave the profession. Zambia is expected to recruit 130,300 new teachers by 2030 (UIS, 2015).

RECOMMENDATIONS

- Revisit existing salary scales and structures of incentives so as to encourage and facilitate improvements in the status and conditions of teachers and teacher educators and to re-invigorate the teaching profession. Specifically, practices which lead to primary school teachers being considered inferior to secondary school teachers should be discouraged by ensuring that teachers are remunerated according to their qualifications and experience.
- Develop specific career pathways for the teaching profession at the different levels of the education sector through appropriate training, deployment, and remuneration schemes to ensure that the most qualified teachers remain in the classroom so as to address the challenge of improving learning for all children. Specifically, all teachers, including primary school teachers, should be encouraged to obtain the highest qualification possible, including diplomas and degrees (master's degrees or even doctorates), and should be rewarded accordingly. Such policies should limit the current practice of primary school teachers having to enter secondary schools to improve their salaries.

Policy Issue 4: Weak utilization of information and communications technology for implementing continuing professional development programmes

Government policy encourages CPD programmes using information and communications technology (ICT), though there remain many challenges in terms of access, content, and ICT skills.

Evidence

Distance education (DE) for teacher training has been used in Zambia since the 1960s (Harry, John, and Keegan, 2013). However, as documented in other parts of sub-Saharan Africa, applying information and communications technology (ICT) tools in DE remains challenging. In 2003, there were 4,500 teachers enrolled in distance learning programmes across the country, yet the National In-Service Teachers' College (dedicated to DE) only had capacity to accommodate 500 teachers each year. Furthermore, only 360 students out of 2,580 distance learning applicants were admitted at the University of Zambia during the same year, as most applicants could not afford the studies and had no government sponsorship (Thomas, 2008).

Print media, informal tutorial group meetings, and face-to-face residential tutorials are the main modes of delivering DE. Most lecturers do not have DE expertise 'and their attitudes towards distance education are not much different from the rest of the people who look at distance education as a second-class form of education' (Chiyongo, 2010: 71). In South Africa, an initial survey revealed that an ICT-based distance-learning module in education management had to revert to print-based delivery because only 1 per cent of the target group of teachers in rural areas had reliable internet access. Text messages were used to supplement the print material since most of the learners had mobile phones (Aluko, 2009).

The *Zambia Education Curriculum Framework 2013* stipulates that DE programmes for pre-service and in-service teacher education be developed by providing institutions according to the guidelines of MESVTEE. The Ministry, furthermore, is responsible for ascertaining that the programmes are managed by educators who are qualified in DE methodologies (MESVTEE, 2013). However, findings from an evaluation of a primary teacher distance learning diploma course in Zambia show that:

> *'(a) There was no consistent system for distributing modules and reports. This frequently made it difficult for students to complete assignments on time; (b) The effectiveness of the student support and tutoring system was limited by the low frequency and short duration*

of contact sessions; (c) Some tutors were not conversant with the content of the modules before contact sessions; (d) District management teams were not well prepared in terms of knowledge and skills for supporting students' (Chiyongo, 2010: 78).

In 2006, Zambia developed a draft ICT policy for education and a draft National Implementation Framework for ICT (2007 to 2010) within the education system. The curricula, syllabuses, and materials for distance education would be digitalized and made available online for schools. Additionally, there would be 'development and implementation of an interactive distance education programme for continuous education of in-service basic and high-school teachers including an on-line tutoring by the National Universities and Colleges of Education' (IICD, 2009, education section, para. 1).

Discussion

In his article *Time for Radical Change in Teacher Education,* Moon (2010) suggests that new models and a radical shift in policy are required to meet the lack of capacity for CPD, especially in most sub-Saharan African countries where, 'the vast majority of resources are going to campus, residential training programmes extending for up to three or four years, whilst unqualified teachers flood into the classrooms and existing teachers have little or no opportunities for professional development" (Moon, 2010: 10). Moon also notes that school-based programmes with diverse open and distance teaching and learning methodologies can be a solution, and proposes six central strategies:

- Fully integrate school-based, distance-learning approaches into national training policies; not 'bolt-on projects' to deal with crises but fully integrated strategic thinking.
- Establish a new, practical, classroom-focused curriculum for upgrading courses, and for continuing professional development: the biggest problem for distance education courses is when planners try to replicate the organization of campus-based credit courses.
- Adapt more formative portfolio assessment systems giving primacy to classroom practice; the dead hand of timed examinations still weighs heavily on many programmes.
- Model costs in programme design in advance of implementation; problems of sustainability almost always arise when this is not done.
- Plan for the progressive adaptation of information and communication technology (ICT), especially mobile technologies; too many distance programmes continue to ignore the potential of this.

- Use media, especially radio, to make training more interesting and stimulating; too much teacher education is 'plain boring' (p. 10).

Though internet access and ICT-supported learning are increasing in Zambia, it is mostly within urban schools. In 2009, the Centre for Commonwealth Education at the University of Cambridge (United Kingdom), in partnership with diverse stakeholders in Zambia, launched a pilot project called OER4Schools to test whether open educational resources (OERs) could be used in ICT- and internet-equipped primary schools. It identified and adapted a school-based professional development model for the local context. Three schools were used in the pilot and a local distance-learning expert assisted the teachers in introducing and interacting with new technologies. The main outcome of the pilot was a professional learning resource for teachers and student teachers, focusing on interactive teaching and learning, with and without ICT. A key element of this resource, according to the project report:

> 'is the use of unique video clips illustrating interactive practice (produced in Zambian and South African primary classroom contexts) as a stimulus for discussion. The resource is freely available for re-use under a Creative Commons license. It supports different modes of learning, including collaborative and individual use, as well as blended learning as part of a course' (University of Cambridge, 2015, pilot project section, para. 4).

The second phase of the OER4Schools project in 2010 included more interaction among teachers using digital resources such as netbooks, instant messaging, Skype calls, and emails. The model can be used for both online and offline interaction using digital and non-digital learning resources. Results show that there was increased interaction among students and less 'chalk and talk' from teachers. However, many ICT projects are based on one-off workshops that are not sustainable and often have limited relevance and value in terms of actual classroom practice. Some recent research indicates that 'a site-based CPD programme drawing on teachers' local networks is a promising approach' (Hennessy *et al.*, 2012: 37).

The spread of mobile phones in sub-Saharan Africa has enabled innovations in mobile learning, which can bridge access and affordability gaps found in traditional education. Nevertheless, mobile broadband penetration is still hindered by high costs. iSchool Zambia is a for-profit company which provides a universal online e-learning package with laptops, tablets, internet access, teacher training, etc. The model is 'aimed at improving standards in existing schools as opposed to investing in building new schools' (Stanfield, 2015: 143). Though mobile technologies are used to support student learning and professional development among teachers, they

are not universally available, especially in remote parts of low-income countries. Furthermore, the small screen on a mobile phone can hinder access to certain features and interactions, though smartphones are better.

Too much dependence on mobile devices for virtual interaction, such as through text messaging, 'means mobile-teacher professional learning runs the risk of being reduced to fact-based or rote learning versus procedural learning focusing on improving instructional skills and behaviours' (Burns, 2015: para. 4). Whenever possible, mobile phones should not be an alternative to the tested and proven methods of professional development and support. Burns further notes that 'We need to guard against a reductionist vision of learning that conflates teacher professional development and support with little more than text messages, phone calls, and audio snippets – versus sustained face-to-face interaction with colleagues, materials and experiences' (Burns, 2015: para. 5).

RECOMMENDATIONS

- Government should equip schools as well as teacher training centres with modern ICT tools to support teaching and learning, as well as teacher CPD, and should also provide technology-skilled personnel to support schools in enhancing their use of ICT.
- Make available effective programmes, and increase access to ICT tools, for improving teachers' and instructors' use of basic ICT and pedagogical skills for improving learning and teaching, and develop teacher CPD. Specifically, support networks are required among teachers to facilitate face-to-face and virtual discussion platforms and the sharing of experiences and learning materials.
- Encourage the combination of online and offline teaching and learning resources among teachers and students. When there is no internet connection, it is still possible to access offline applications. Including non-digital resources is equally important for interaction.
- Promote consultations among users in order to agree on the best ICT solution. Some low-cost ICT solutions are as effective as some more expensive platforms.
- Increase access to ICT tools by improving infrastructure in rural teacher training institutions. This enhances the capacity of users since it increases access points.

Policy Issue 5: Lack of facilities and resources, and weak capacity and qualifications of staff at teacher education institutions

Currently, many teacher training institutions have limited capacity and expertise among staff and lack basic facilities and resources, including libraries and ICT infrastructure, to develop the necessary knowledge and skills that trainee teachers require to make a difference to the quality of education in Zambia.

Evidence

While recognizing the important contribution of teacher training colleges in providing the country with a regular supply of qualified teachers, the Ministry of Education (1996), in its *Educating Our Future* document, notes that these colleges 'have been handicapped in the accomplishment of their mission by their inability to bring the quality of their output to the level they would have desired' (MoE, 1996: 111). Key reasons that affect the quality of graduates include:

- an overloaded and inappropriate curriculum;
- promotion of rigid teacher-centred methodologies;
- an excessively demanding examination system;
- staff with inadequate or unsuitable educational and professional qualifications;
- a shortage of educational resources of all kinds (MoE, 1996: 112).

Despite the commitment by the Ministry to address this situation, a number of challenges remain, with most institutions still lacking adequate facilities and relevant teaching and learning resources, while many teaching staff still lack the requisite experience and qualifications for preparing teachers to meet the needs of the school sector. Beyani (2013) notes that 'many institutions are in a state of disrepair, with broken down workshops and laboratories' (p. 28). Highlighting the lack of adequate teaching and learning material, Pire (n.d.) notes that 'the Colleges of Education do not have libraries with enough textbooks and other training and learning resources necessary for the moulding of teachers. In most cases, the few books available are too shallow to mould a teacher's skills' (p. 219). In reviewing the status of universities, the National Implementation Framework (MoE, 2010) notes that:

> *'the reality in our universities is that there are serious shortfalls that render the quality of university education poor. These shortfalls include lack of serviceable equipment, inadequate infrastructure, and insufficient ICT facilities, libraries, and laboratories. Furthermore, there is a problem of poor staffing levels, weak appraisal system of staff, and lack of locally-produced study materials'* (p. 43).

Similarly, the READ review of teacher training in Zambia found that while the training for teachers in lower basic education was appropriate, most college lecturers were former secondary teachers who had never taught in primary schools, and who, thus, were ill equipped to prepare student teachers. To demonstrate this point, the report offers the following example:

> *'since the tutors in primary teachers colleges are normally former secondary teachers, with Secondary Teachers Diploma or a degree, they also have limited assessment training ending on assessment definitions. This therefore creates a vicious circle of lack of assessment training in the teaching fraternity cutting across all the levels of qualifications'* (READ, 2010: 28).

Furthermore, Longe and Chiputa (2003) report that some colleges offering upgrading courses through distance education (DE) for primary school teachers face similar challenges regarding inadequacy of study materials, inadequately trained tutors, and poor infrastructure.

According to NIF III (2011–2015), management structures and programmes are now available for CPD at all levels in the country, and the creation of school-based teacher resource centres has decentralized these activities. The School Program of In-service Training for the Term (SPRINT) has been used to implement CPD at school level. However, while the structures of CPD appear to be well developed, the efficacy of the structure in improving teaching and learning is weak. CPD is also 'faced with challenges such as inadequate reference materials, infrastructure, poorly stocked specialised room, and lack of integration of CPD and ICT in the teacher education curriculum' (MoE, 2010: 37).

Discussion

Global initiatives such as EFA and the MDGs have increased participation in basic education, yet they have also demanded a larger share of funding, often at the cost of teacher training. Similarly, the introduction of early childhood education has required the transfer of some teachers from primary schools to provide the human resources for this provision. Quality remains a problem though some changes have been taking place. For instance, the two-year Zambia Teacher Education Course (ZATEC) programme was phased out for producing teachers with limited competence. 'The country has also introduced a revised national primary curriculum on account of the ineffectiveness of teaching methods supported under the Primary Reading Program' (MESVTEE, 2014*a*: 34).

Masaiti and Chita (2014) argue that the upgrading of two teacher training colleges to the status of universities (Nkrumah University and Copperbelt Education University) was merely a political gesture since they do not offer curricula relevant and responsive to trainees or national needs. 'The other challenge is under-funding, resulting in overcrowding, dilapidated infrastructure, high student-lecturer ratios, lack of expansion in facilities, high levels of indebtedness, inadequate education materials and ICT,' they write (Masaiti and Chita, 2014: 448). These authors also note that donor-driven initiatives, such as the school-based CPD offered by the Japan International Cooperation Agency (JICA), have not been sustained after completion. Similarly, Ibn Junaid and Maka argue that 'the provision and implementation of INSET activities is constrained by lack of funding and non-inclusion of INSET in national policies and budgetary allocations' (Ibn Junaid and Maka, 2014: 71).

In a recent report on *In-Service Teacher Education in sub-Saharan Africa*, Ibn Junaid and Maka (2014) identified a number of challenges and lessons learned in eight sub-Saharan African countries, including Zambia. The authors note that CPD policy in Zambia is demand-driven and connects with wider policy efforts to improve teachers' effectiveness. They also report that CPD programmes for basic and secondary school teachers take place in formal institutional structures which are used for pre-service education, and are normally occupied by regular teacher trainees. Key challenges across most teacher training institutions in African countries, the authors note, concern the limited capacity to absorb the huge number of certified and uncertified basic education teachers, ill-equipped facilities, insufficient training materials, and poorly paid tutors.

RECOMMENDATIONS

- Greater investment is required to improve facilities and provide relevant resources for all teacher training institutions. To this end, the national education budget should include line items for INSET programmes.
- Effective capacity development programmes should be put in place to enhance the capacities and skills of current academic and support staff in all teacher training institutions. In this regard, an academic staff development unit needs to be created, either centrally, or decentralized in all teacher training institutions.
- Strengthen existing capacity in all teacher training institutions by employing competent staff to manage and coordinate CPD activities.
- Monitoring and evaluation of CPD is necessary to understand capacity limitations and to develop mechanisms for sustainability.
- Establish regulatory frameworks at decentralized levels, with authority, management, and funding so as to ensure quality training for staff at teacher training institutions.

Policy Issue 6: Low status, morale, and professionalism of teachers

Generally, there is low morale within the teaching workforce, while respect for the teaching profession is slowly being eroded within the community.

Evidence

Educating Our Future (MoE, 1996) notes that the status of teachers in Zambia, and hence their morale, has been greatly diminished by the deterioration in their conditions of service, and argues that this is due to a progressive decline in real income. The document further notes that:

> *'it is not satisfactory that the situation continues as it is. It would be even less satisfactory if it were allowed to deteriorate further. Schools cannot be effective if teachers are demoralized. Significant strides forward in preparing children for the world of the twenty-first century cannot be made on the basis of a demotivated cadre of teachers. On-going professional and personal development, which lie at the very heart of school and educational improvement, are not the priority concerns of a person whose remuneration does not match the status and responsibility attaching to his or her appointment'* (p. 120).

In addressing this challenge, the document argued for the establishment of an accreditation board for teachers.

Almost two decades on, issues of teacher motivation, morale, status, and professionalism continue to impact on the teaching force. In 2014, the Zambia National Union of Teachers (ZNUT) urged the government to increase funding for school infrastructure and also pay all outstanding allowances owed to teachers, to motivate them at work. An official of ZNUT argued that 'teachers work without resources or proper training and, where they engage in training, Government has not recognized their efforts by placing them in correct salary scales. The Government should, therefore, increase funding to the sector' (Kabaila, 2014: para. 5).

The situation in rural schools is especially bad. Rural schools in Zambia are less attractive, particularly to newly qualified urban teachers. The number of female teachers in urban schools is double the number of male teachers. This is partly because female teachers tend to resist posting to rural schools, often for cultural and social reasons. Lack of infrastructure and limited amenities also add to the resistance (Mungai, 2015). The hardship allowances awarded to teachers who work in rural areas are generally inadequate. Up to half the monthly salary earned by teachers in rural Zambia can be spent on transport and accommodation to and from the district offices to collect it (Bennell and Akyeampong, 2007).

The Teaching Profession Act of 2013 resulted in the establishment of the Teaching Council of Zambia (TCZ), in early 2015, with the role of overseeing:

- the regulation of teachers, their practice, and professional conduct;
- the accreditation and regulation of colleges of education;
- matters connected with, or incidental to, the foregoing (Government of Zambia, 2013: 151).

The establishment of the TCZ is a significant step forward, not only in enhancing the teaching profession in Zambia but also in addressing the key challenge of improving teacher quality. Specifically, the act requires the teaching council to: register all practising teachers in the country, including teachers in private and community schools; monitor and support the provision of effective continuing professional development programmes for teachers; ensure all colleges of education are duly accredited to offer quality programmes for the training of teachers; and develop a code of ethics and address all disciplinary matters relating to the teaching profession.

In interviews with TCZ staff, a number of priorities were noted, including: (i) the sensitization of teachers to the roles and responsibilities of the council, especially the requirements regarding registration and the code of ethics; (ii) the establishment of a system of CPD that will meet the needs of all teachers; and (iii) the accreditation of colleges of education and improvement of capacity and skills of college lecturers. Notwithstanding the challenges that need to be addressed, the effective functioning of the TCZ holds enormous promise for the education section in Zambia, and has the potential to make a significant contribution in addressing the challenge of improving quality education for all in Zambia.

Discussion

Salifu (2013) notes that teachers' low motivation is partly due to diminished regard for their profession that in turn causes 'attrition, low morale, burnout, absenteeism, lateness and lack of commitment. The consequence is a decline in the standard of education available to learners and difficulties in workforce planning for education' (p. 98). Poor pay is noted as a key cause of low morale, particularly among basic education teachers in sub-Saharan Africa. For such teachers, the profession is often just a stepping stone towards other career pathways. Moreover, some teachers join the profession because their high school grades were not good enough to pursue other professions at college or university (Bennell and Akyeampong, 2007). Verhagen and Tweedie (2002) have identified a number of factors which cause dissatisfaction with terms of service, including: lack of proper accommodation; lack of housing schemes; inadequate provision of loans; absence of a health scheme; poor promotional

prospects and lack of clear guidelines regarding promotion; concern that corruption affects promotion and selection; and difficult communications with the employer, coupled with a sense that teachers' problems are disregarded. Another challenge highlighted by UNESCO (2014) pertains to the salary bill and its implications for practice. Specifically, 'governments need to pay competitive salaries to attract the best teachers, but many face a dilemma: higher salaries would raise the public budget unless teachers' numbers fell, which would increase class size. In countries where classes are already large, as in much of sub-Saharan Africa, this would reduce education quality' (p. 254).

Various methods are used to motivate teachers. However, evidence of their efficacy is often in short supply. For instance, from a policy perspective, offering incentives to teachers is viewed globally as a means of enhancing student performance, yet 'no evidence is found that teacher incentives increase student performance, attendance, or graduation, nor is there any evidence that the incentives change student or teacher behaviour' (Yawe, 2014: 15). Mutono (2010) advocates a deeper understanding of the poor working conditions of many Zambian teachers when the government plans and implements education reforms. Teachers have families and dependents that they take care of financially. In some rural areas, they are the only formal income earners yet sometimes go to work hungry. 'A teacher who is the only or main breadwinner, and has at least four family members to support, needs to earn at least US $10 per day to keep the family above the poverty line of US $2 per day per person' (UNESCO, 2014: 254). Non-monetary incentives should also be considered to boost teacher morale.

'Inadequate, irregular, or delayed salaries often force teachers to seek supplementary income' (U4 Anti-Corruption Resource Centre, 2006: 6). Due to low salaries, some Zambian teachers take on additional jobs to earn extra income. In the past, private tutoring was a lucrative activity for teachers who charged exorbitant fees to students who could not enter the mainstream education system. Over one-third of public high schools had academic production units (APUs) that were created for such students. Cash from the APU was shared among teachers who engaged in private tutoring, although they were conducted in publicly financed spaces and facilities. However, the government abolished APUs in 2011 because more classrooms had been built to accommodate the students. Moreover, it was argued that the teachers were exhausted from the extra work and could not be effective during regular teaching hours (Siulapwa, 2011).

Mutono notes that some teachers 'attributed their involvement in extra jobs such as APU to the meagre salaries they were getting, but that robbed them of time to prepare their work hence became less committed; the pupils were the ones that suffered' (Mutono, 2010: 80). In 2013, the government also banned paid-for public tuition

in all schools, which was another source of private income for teachers. The tuition classes were conducted by teachers for national examination candidates during the weekends and on school vacations. The ban was intended to ensure all students have equal opportunities for study, particularly those who are disadvantaged economically and cannot afford to pay for private classes.

A number of countries have established teacher councils to enhance the status of the teaching profession as well as the capacity and skills of teachers. In Ghana, Nigeria, and South Africa, the National Teaching Council, the Teachers' Registration Council of Nigeria (TRCN), and the South African Council of Educators (SACE), respectively, were established to set professional standards for teaching and develop a code of conduct and ethics for teachers, to ensure registration and/or licensing of all teachers, and to provide or coordinate continuing professional development to all teachers in the country (Ibn Junaid and Maka, 2014; Mosoge & Taunyane, 2009). Regarding teacher professional development, Ibn Junaid and Maka (2014) note that the Zambian MoE developed a comprehensive policy framework to guide the National Teaching Council (NTC) in carrying out its role, in response to the challenges of externally driven professional development programmes and the low impact of these programmes on students' numeracy and literacy performance. Similarly in Nigeria, the linking of registration requirements by the TRCN to salary scales resulted in the recruitment of more qualified teachers for basic education schools (Ibn Junaid and Maka, 2014).

In their review of SACE, Mosoge and Taunyane (2009) found that the council had done well in addressing two of its mandates, namely *registration* and *code of ethics*, and performed poorly in the execution of its professional development mandate. The authors note that this poor performance was attributed to the lack of clarity regarding how professional development should be delivered and by whom, as well as to limited funding. To address this challenge, the authors recommended that:

> *'SACE should initiate, support and facilitate professional development of educators; accredit service providers and professional development courses because SACE itself is not responsible for the delivery of professional development initiatives, but should ensure that policy is implemented; promote innovation and active research projects by educators; and organise research and educational conferences for purposes of disseminating'* (Mosoge and Taunyane, 2009: 15).

RECOMMENDATIONS

- Prioritize the effective functioning of the Teaching Council of Zambia by ensuring availability of funds as well as of staff. Specifically, the work should focus on sensitizing teachers to the roles and responsibilities of the TCZ, and beginning the process of registration.
- Ensure that an integrated policy framework for providing continuing professional development programmes is aligned with the wider systems and policies of the education sectors. Specifically, this framework should be aligned with a revised salary structure that rewards all teacher efforts towards CPD.

References

African Revival. 2015. *Community teacher training programme.* Retrieved from: http://africanrevival.org/what-we-do/zambia/teacher-training/.

Aluko, R. 2009. 'The impact of an Advanced Certificate in Education (ACE) program on the professional practice of graduates'. In: *International Review of Research in Open and Distance Learning, 10*(4), 1–25.

Banda, B. 2014. *Continuing professional development through sustainable in-service teacher training system in Kenya, Malawi and Zambia.* Retrieved from: https://opus4.kobv.de/opus4-tuberlin/files/5125/10_banda_5125.pdf.

Bennell, P.; Akyeampong, K. 2007. *Teacher motivation in sub-Saharan Africa and South Asia* (No. 71). London: DfID.

Beyani, C. 2013. *Zambia: Effective delivery of public education services.* Johannesburg: The Open Society Initiative for Southern Africa.

Burns, M. 2015. *Not just for students: Mobile teacher professional development.* Retrieved from: http://elearnmag.acm.org/featured.cfm?aid=2747006.

Cashen, L.; Elacqua, G.; Gometz, E.; Karume, S.; Nadirova, K.; Naito, E.; Schmeil, N. 2001. *Educating children out of the system: The community schools movement in Zambia.* Retrieved from: http://www.unicef.org/evaldatabase/files/2001_Zambia_Educ_Children.pdf.

Chanda, C. 2008. *Teaching and learning of English in secondary schools: A Zambian case study in improving quality.* London: Commonwealth Secretariat.

Chiale, G. 2014. 'Deal to upgrade 2,000 teachers signed'. *Times of Zambia*. Retrieved from: http://www.times.co.zm/?p=6409.

Chileshe, J. 2012. Assessment of the Education Sector National Implementation Framework, 2008-2010 (12) – NIF II. A report commissioned by the Embassy of the Kingdom of the Netherlands in Lusaka, Zambia. October 2012

Chireshe, R.; Makura, A. 2014. 'Educator motivation and morale in South Africa'. In: M. W. Legotlo, (Ed.), *Challenges and issues facing the education system in South Africa* (pp. 125–143). Pretoria, South Africa: Africa Institute of South Africa.

Chiyongo, V. 2010. 'Management of distance teacher education in Zambia' PhD thesis. Pretoria: South Africa.

DeStefano, J. 2006. *Meeting EFA: Zambia community schools.* Washington, DC: EQUIP 2. Retrieved from: http://www.equip123.net/docs/e2-ZambiaCaseStudy.pdf.

Fairhurst, G.; Gibbs, W.; Jain, P.; Khatete, D.; Knamiller, G.; Welford, G.; Wiegand, P. 1999. *The effectiveness of teacher resource centre strategy.* London: Department for International Development, Education Department.

Gibbs W.; Kazilimani J. 1999. 'Teacher resource centres in Zambia'. In: G. Fairhurst, W. Gibbs, P. Jain, D. Khatete, G. Knamiller, G. Welford, and P. Wiegand (Eds), *The effectiveness of teacher resource centre strategy* (pp. 178–214). London: Department for International Development, Education Department.

Government of Zambia. 2013. *The Teaching Profession Act, 2013*.

Harry, K.; John, M.; Keegan, D. (Eds.). 2013. *Distance education: New perspectives*. London: Routledge.

Hennessy, S.; Haßler, B.; Mwewa, G. 2012. 'Using digital technology and school-based professional development to leverage interactive classroom teaching in Zambia'. In: J. MacBeath, M. Younger and C. Sugrue, (Eds), *Millennium Goals revisited: A commonwealth of learning* (pp. 35–48). London: Routledge.

Haßler, B.; Hennessy, S.; Cross, A.; Chileshe, E.; Machiko, B. 2015. 'School-based professional development in a developing context: Lessons learnt from a case study in Zambia. In: *Professional Development in Education, 41*(5), 806–825.

Ibn Junaid, M.; Maka, F. 2014. *In-service teacher education in sub-Saharan Africa: A synthesis report.* Paris: International Task Force on Teachers for EFA.

International Institute for Communication and Development. 2009. *Enhancing the Zambian education sector with ICT.* Retrieved from: http://www.iicd.org/files/leveraging%20policy%20project%20Zambia-online.pdf/.

IMF (International Monetary Fund). 2005. *Zambia: Poverty reduction strategy paper progress report.* March 2005 IMF Country Report No. 05/112. Washington, DC: Author.

James-Traoure, T.A.; Finger, W.; Ruland, C.; Savariaud, A. 2004. *Teacher training: Essential for school-based reproductive health and HIV/AIDS education. Focus on sub-Saharan Africa*. Youth Issues Paper 3, pp. 2–26. Arlington, VA: Family Health International, Young People Net Program.

Kabaila, M. 2014. 'Teachers want more education funds'. *Times of Zambia*. Retrieved from: http://www.times.co.zm/?p=38075.

Kambilima, T. 2015. 'Need to upgrade public school teachers' salary scales. *Zambia Daily Mail*. Retrieved from: https://www.daily-mail.co.zm/?p=24476.

Longe, R.; Chiputa, S. S. 2003. *National capacity building of lead teacher training institutions: A mission to Zambia.* Retrieved from: http://unesdoc.unesco.org/images/0014/001435/143522e.pdf.

Lusaka Voice. 2013. 'Government wants a professional teaching service'. Retrieved from: http://lusakavoice.com/2013/04/11/government-wants-a-professional-teaching-service/.

Masaiti, G.; Chita, J. 2014. 'Zambia: An overview of formal education'. In: C. Wolhuter (Ed.), *Education in East and Central Africa* (pp. 423–454). New York: Bloomsbury Publishing.

Mataka, S. M. 2011. *Teachers' assessment of school-based continuing professional development in selected basic schools of Lusaka District, Lusaka Province, Zambia.* Lusaka, Zambia: University of Zambia.

Ministry of Education. 1996. *Educating our future: National policy on education.* Lusaka: Government of Zambia.

Ministry of Education. 2009. *School-based continuing professional development (SBCPD) through lesson study.* Teaching Skills Book, 1st Edition. Lusaka, Zambia.

Ministry of Education. 2010. *Education sector National Implementation Framework III 2011–2015*. Lusaka, Zambia: Directorate of Planning.

Ministry of Education, Science, Vocational Training, and Early Education. 2013. *Zambia education curriculum framework 2013.* Lusaka, Zambia: The Curriculum Development Center.

Ministry of Education, Science, Vocational Training, and Early Education. 2014*a*. *Education for All 2015 national review Zambia.* Lusaka, Zambia: Author.

Ministry of Education, Science, Vocational Training, and Early Education. 2014*b*. *Zambia: Educational statistical bulletin 2013.* Lusaka, Zambia: Directorate of Planning.

Moon, B. 2010. 'Time for radical change in teacher education'. In: *Connections, February 2010, 15*(1). Vancouver, BC, Canada: Commonwealth of Learning.

Moonga, B. 2010. 'Challenge to retain Zambia's teachers'. Inter Press News Service Agency. Retrieved from: http://www.ipsnews.net/2010/11/challenge-to-retain-zambias-teachers/.

Mosoge, M. J.; Taunyane, T. P. 2009. 'Educator professionalism: Is the South African Council for Educators succeeding?' In: *SA-eDUC JOURNAL* 6(1), 1–19.

Mubanga, R. M. 2012. *School Program of In-service Training for the Term (SPRINT) Program in Zambia.* Japan Education Forum IX.

Mulkeen, A. 2010. *Teachers in Anglophone Africa: Issues in teacher supply, training, and management*. Washington, D.C: The World Bank.

Mulkeen, A.; Crowe-Taft, N. 2010. *Teacher attrition in sub-Saharan Africa: The neglected dimension of the teacher supply challenge.* Paris: UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0018/001881/188197e.pdf.

Mungai, C. 2015. 'The continent's teachers skip school because they are so poorly paid: Yes, and no'. *Mail and Guardian Africa*. Retrieved from: http://mgafrica.com/article/2015-01-14-teaches-skip-school-because-they-are-so-poorly-paid-yes-and-no.

Mutono, V. 2010. 'Factors affecting teacher motivation in Zambia: The case of selected high schools of Lusaka Province'. MEd thesis. Lusaka, Zambia: University of Zambia.

Perraton, H. 2010. *Teacher education: The role of open and distance learning.* British Columbia, Canada: Commonwealth of Learning.

READ. 2010) 'Zambia self-diagnosis report'. Russian Education Aid for Development Project. Unpublished report. Lusaka: Examinations Council of Zambia.

Salifu, I. 2013. 'Improving teacher identity and professional practice: Does motivation matter?' In J. Madden and R. Smith (Eds.), *Teachers talk about what's important: Papers from 2012 International Teacher Education Dialogue Conference* (pp. 94–101). Tarragindi, Australia: The Primrose Hall Publishing Group.

Sianjibu-Miyato, H. M. 2013. 'The role and case for supporting community schools in Zambia'. Paper presented at the Leading Change: Australia Awards Alumni in Africa's Development conference. Lusaka. Zambia, 10 September 2013. Retrieved from: http://www.australiaawardsafrica.org/wp-content/uploads/2013/05/DAY-2-6_Harriet-Sianjibu-Miyato.pdf .

Silwimba, J. M. 2006. *Zambia: Status of teachers in Zambia – 2006. The UNESCO Teacher Training Initiative for Sub-Saharan Africa. First Meeting of National Coordinators for UNESCO's Teacher Training Initiative for sub-Saharan Africa 7-9 March 2006, BREDA, Dakar, Senegal.* Retrieved from: http://unesdoc.unesco.org/images/0014/001448/144824e.pdf.

Sinyolo, D. 2008. 'Teacher mobility, gender and status, I'. In: Commonwealth Secretariat (Ed.), *Gender, HIV/AIDS and the status of teachers*: *Report of the Third Commonwealth Teachers' Research Symposium* (pp. 9–10). London: Commonwealth Secretariat.

Siulapwa, D. 2011. *Academic Production Unit (APU) classes in Zambia.* Retrieved from: http://ukzambians.co.uk/home/2011/03/11/academic-production-unit-apu-classes-zambia/.

Stanfield, J. 2015. 'Affordable learning: Transforming education at the bottom of the pyramid. In: P. Dixon, S. Humble and C. Counihan (Eds.), *Handbook of international development and education* (pp. 131–148). Cheltenham, UK: Edward Elgar Publishing.

Teacher Development Unit. 2015. Interview conducted with staff of the Teacher Development Unit, 15 June 2015.

Thomas, C. M. 2008. *Zambian school administrators and teachers speak out: "The challenges are too many"*. Retrieved from: http://itdl.org/Journal/Nov_08/article06.htm.

UNESCO. 2014. *Teaching and learning: Achieving quality for all. EFA global monitoring report 2013/4.* Paris: Author.

UNESCO. 2015*a*. *Teacher training: A key to scaling up good quality comprehensive sexuality education.* Retrieved from: http://www.unesco.org/new/en/hiv-and-aids/our-priorities-in-hiv/sexuality-education/teacher-training/.

UNESCO. 2015*b*. 'Investing in teachers is investing in learning: A prerequisite for the transformative power of education'. Background paper for the Oslo Summit on Education for Development. EFA Global Monitoring Report Team. Paris: Author.

UIS (UNESCO Institute for Statistics). 2015. *Global teacher shortage.* Retrieved from: http://www.uis.unesco.org/Education/Pages/world-teachers-day-2015.aspx.

University of Cambridge. 2015. *OER4schools.* Retrieved from: http://www.educ.cam.ac.uk/centres/archive/cce/initiatives/projects/oer4schools/.

U4 Anti-Corruption Resource Centre. 2006. 'Corruption in the education sector'. *U4 Issue 4*. Retrieved from: http://www.u4.no/publications/corruption-in-the-education-sector/downloadasset/62.

Verhagen, S.; Tweedie, L. 2001. 'They've got class! A policy report on Zambian teachers' attitudes to their own profession'.

VSO (voluntary Service Overseas). 2002. *What Makes Teachers Tick* Lusaka: VSO.

Vilsack, C. 2014. *A tale of two teachers.* Retrieved from: https://blog.usaid.gov/2014/06/tale-of-two-teachers/.

VVOB (Flemish Association for Development Cooperation and Technical Assistance). 2013. *Past programme: Teacher training support programme*. Retrieved from: http://www.vvob.org.zm/cms/node/64.

Yawe, B. L. 2014. 'Technical efficiency of Uganda's primary schools. In: *Social Science Journal 3*(1), April 2012. Newcastle upon Tyne, UK: Cambridge Scholars Publishing.

3.3 Technical Education, Vocational and Entrepreneurship Training

This section provides a policy review of the TEVET, as one of the priority areas in the framework of Zambia's efforts to address the Education 2030 Agenda. The review is based on the methodology described in the introduction of this report. The stakeholders who took part in the consultations included the permanent secretary (PS) of science and technology (MoHE), the director general of TEVETA, TEVETA board members, the business development and marketing officer of the Industrial Training Centre, the director of Mazabuko Skills Training Centre, employers and trade unions members, and the chief curriculum specialist.

TEVET being a subsector with particular features and links with the economy and the labour market, it is important to duly depict the related context before addressing the actual policy review.

Legal and policy framework

In Zambia, technical education, vocational and entrepreneurship training (TEVET) is guided by three main policy frameworks:

i. The TEVET policy (1996), which is the main framework for technical educational, vocational and entrepreneurship training in Zambia. It recognized the need to adapt TEVET to meet the needs of a changing economy, including

an important share of informal sector, and to provide the right mix of skills to support national development and youth's employment prospects. Hence, the goals of TEVET policy reform (1996), which are still relevant, included: (i) to balance the supply of skilled labour market at all levels with the demands of the economy; (ii) to act as a vehicle for improved productivity and income generation; and (iii) to be an instrument for the minimization of inequalities among the people (MSTVT, 1996).

Based on this policy, the TEVET Act No. 13, of 1998, and the TEVET (Amendment) Act No. 11, of 2005, which led to the establishment of the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) became important milestones for Zambia's TEVET subsector. The 1998 Act also defined a more decentralized governance framework, which represented a radical change in TEVET management.

ii. Vision 2030 (2006) recognized TEVET's role as an integral part of the education and skills development sector and its contribution to economic development. The vision for education and skills development included increasing university and skills training output by 2 per cent each year and improving equity of access, while maintaining internationally recognized and locally validated standards of quality. By addressing the issues of youth unemployment and skills shortages, the Vision 2030 has paved the way for both the Fifth (FNDP) and the Sixth National Development Plan (SNDP) that put job and employment creation at the core of its activities.

iii. The revised Sixth National Development Plan (SNDP, 2013–2016), whose policy priorities include: inclusive growth, job creation and rural development, underpinned by significant capital project in agriculture, accelerated infrastructure development, energy, health, education, skills development, water and sanitation. To implement these priorities, the revised SNDP aims 'to increase efficiency and equitable access to quality basic skills and TEVET'.

In addition to the above policy frameworks, it is also important to note the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) strategic plan 2014–2016, which takes as its theme 'skills for youth employment'.

All these frameworks recognize the need to promote TEVET as a means of providing young people and adults with the practical knowledge and skills needed for economic and income growth, poverty reduction, employment, productivity, and human development.

System steering and governance

Until 1998, the TEVET subsector was governed by the 1972 Act. The latter officially charged the Department of Technical Education and Vocational Training (DTEVT) of the MSTVT with administration of TEVET in Zambia, providing for the department to operate a centralized, publicly supported training system with the aim of producing specialists at the crafts, technician and technologist levels for employment in the formal sector of the economy.

The TEVET 1998 Act, replacing the previous legislation, defined a more decentralized governance framework. It established the TEVETA as an independent legal entity charged with regulating, monitoring and coordinating TEVET in coordination with industry, employers, workers and other stakeholders. TEVETA has 21 regulatory and facilitation functions that it must deliver, as defined by the Act. These functions include: administer and manage TEVET fund; advise the Minister on TEVET; regulate and advise Management Boards of publicly owned TIs; develop curricula; set standards; administer examinations and trade tests; accredit and register both public and private TEVET institutions; collect, manage, and disseminate labour market information relating to TEVET, etc.

TEVETA is organized into four divisions: the Development Division, the Training Standards Division, the Assessments and Qualifications Division, and the Finance and Administration Division. Through its Training Systems Development Unit, TEVETA oversees four different TEVET delivery models in Zambia. It is funded through a grant from the government, though it also generates revenues by conducting examinations and offering other services. The government grant was reduced by 5 per cent in 2015.

The 1998 Act also enabled MSTVT, in consultation with TEVETA, to establish legally autonomous Management Boards of publicly-owned TIs, charged with providing training, developing curricula, maintaining standards prescribed by TEVETA, staffing and compensation, administration, and cost recovery through fees for tuition, boarding and other services. The principal of the TI would be appointed by and accountable to the Management Board.

TEVETA is headed by a Director-General, reporting to the TEVETA Board composed of government and non-government stakeholder representatives. The TEVETA board is appointed by the Minister responsible of TEVET and includes three members from the private sector, one trade union representative, one representative of the University of Zambia, one representative of a religious organization involved in providing TEVET, and three members from different ministries, among others. The chair and vice-chair are elected from among the members. The present chair is from the private sector and

represents the Zambia Association of Chambers of Commerce and Industry, while the vice-chair represents the University of Zambia. The board meets every three months.

The Ministry, with overall responsibility for the sector, appoints the members of the TEVETA Board, the TEVETA Director General, and members of the TI Management Boards; it also approves the terms and conditions of service for TEVETA staff, and the charging of fees for tuition or other services by TI Management Boards.

TEVETA was assigned responsibility for developing and managing the Training Qualifications Framework (TQF) in Zambia, which was formally approved in 2010; as of October 2010, fifty qualifications had been registered on the TQF. The Zambia Qualifications Authority was set up through the Zambia Qualifications Act (No. 13, 2011). The Act provides the development and implementation of a national qualifications framework; the registration and accreditation of qualifications; measures to ensure that standards and registered qualifications are internationally comparable; and matters connected with, or incidental to, the foregoing. The Act is also intended to create a single, integrated qualifications framework with a view to enhancing the quality of training, promoting education and training opportunities, and facilitating access to, as well as mobility and progression within, the education system. A 10-level framework ranging from primary education, through TEVET, to doctoral level is in development. *Figure 24* shows the proposed framework, though the final decision on the combined ZQF has yet to be taken.

Figure 24 Proposed Zambia (National) Qualifications Framework

ZQF Level	General education/ Schooling	Technical and Vocational Education & Training	Higher Education
10			Doctoral Degree
9			Master's Degree
8			Post-Graduate Diploma
7			Bachelor's Degree
6		Diploma (Technologist)	Diploma
5		Advanced Cert. (Technician)	Certificate
4		Craft Certificate	
3		Trade Test Level I Certificate	
2	High School (Grade 12)†	Trade Test Level II	
1	Basic Education (Grade 9)	Trade Test Level III	
Regulatory Body	Examinations Council of Zambia	TEVETA	Higher Education Authority

Source: MESVTEE, 2015.

The Zambia Qualifications Authority (ZQA) was formally established by the 2013 Education Bill to regulate university education in the country in order to enhance quality and standardize qualifications, especially important giving the growing role of the private sector in the provision of university education.

Training delivery: registered institutions

As of 31 March 2015, there were 294 training institutions registered with TEVETA; 39 per cent were located in Lusaka, 26 per cent in Copperbelt, and the remainder spread out across eight rural provinces (TEVETA figures). The main providers of TEVET in Zambia include public and private sectors, as well as church-based, community, trust, and non-governmental organizations. The responsibility for corporate governance and management oversight of training providers is vested in the boards appointed by the respective proprietors. In this respect, government training institutions enjoy a degree of autonomy over their own affairs.

TEVETA's 2013 annual report shows that the share of public or government-owned TEVET institutions increased from 21 per cent in 2008 to 32 per cent in 2013 (*Table 21*). At the same time, the share of private training institutions fell from 39 per cent in 2008 to 23 per cent in 2012, and slightly recovered to 28 per cent in 2013. The proportion of other providers remained more or less stable, with the church having the largest at 21 per cent. The reduction in the number of private institutions was mainly attributable to non-compliance with minimum training standards leading to deregistration, while some providers have opted to move away from TEVET service provision (TEVETA, 2013). According to World Bank (2015), the global financial crisis that began to affect the country around 2010 may also have contributed to the decline in the number of private institutions.

Table 21 Number of registered institutions by ownership, 2008-2013

	2008	2009	2010	2011	2012	2013	2013 (%)
Public/Government	58	78	80	87	79	88	32%
Private	107	107	107	96	54	77	28%
Church	59	66	66	65	49	58	21%
Community	8	6	10	9	7	8	3%
Trust	16	14	16	14	11	13	5%
Company	10	14	14	15	13	16	6%
NGO	20	18	15	18	17	15	5%
Total	**276**	**303**	**308**	**304**	**230**	**275**	**32%**

Source: TEVETA Annual Report, 2013.

Training in the TEVET sector in Zambia is offered at the following levels:

- Trade test
- Craft
- Technician
- Technologist/diploma

Entry requirements into these levels differ. Trainees come from primary and secondary education, as well as from other training institutions. Students entering the TEVET will generally have undertaken seven years of primary education and five years of secondary. Higher education is offered at universities and specialized institutes or colleges, which offer two-year certificates and three-year diploma programmes.

Public TEVET is managed by a number of different ministries, including: the Ministry of Higher Education (MHE); The Ministry of Community Development, Mother and Child Health; the Ministry of Tourism and Art; the Ministry of Lands, Environment and Natural Resources; the Ministry of Labour and Social Security; the Ministry of Commerce and Industry; and the Ministry of Agriculture. Twenty-five training institutions are managed by the Directorate of Vocational Education and Training in MHE, while a further fourteen Skills Development Centres are overseen by the Directorate of Open and Distance Education in the Ministry of General Education. An inter-ministerial committee has been established to address issues of common interest and to coordinate the activities of different government institutions.

Non-formal TEVET is offered by private-sector and community-based providers, which include church-run organisations and NGOs. They run training courses for school dropouts and disadvantaged youth. Private TEVET providers focus mainly on business and commercial courses, preparatory courses for international qualifications, and short courses on specific skills, as it is more expensive to offer engineering-type training courses which entail heavy investment. Private TEVET providers are mainly located in urban areas.

It should be noted that data on informal, non-formal, and private TEVET are much harder to access than data on public sector provision. The quality of data also varied according to the sources, suggesting the need to enhance the TEVET management information system. Besides, the utilization of collected data can be further promoted, including through providing more analytical information in the annual reports. For instance, the publication of institutional benchmarking, at least for the institutions receiving public funding, may help in improving fund allocations and accountability.

Access to and participation in formal TEVET

According to TEVETA, the total enrolment in registered TEVET institutions reached 45,000 in 2015, up from 34,911 in 2012, an increase of 28 per cent. Available data show an increasing trend in enrolment since 2009, and an unchanged distribution of student enrolment by programme between 2008 and 2012 (*Table 22*).

Programme-wise, business studies represent the largest share, accounting for 45 per cent of total enrolment, followed by craft programmes, with 24 per cent. In terms of gender, male students account for 55 per cent of total enrolment. While the share of female in the total enrolment is slightly lower at 45 per cent of total enrolment, some programmes such as business are well balanced with a gender parity. However, unbalanced gender ratios can be observed in other programmes like the secretarial studies where almost all students are female, and the craft programmes where the majority of students are male. Overall, gender disparity is worsened at higher level of TEVET programmes, as the share of female students at diploma level was only 8 per cent in 2012.

Table 22 Student enrolment in TEVET by programme, 2008-2012

	2008	2009	2010	2011	2012	2012 (%)
Business Studies	12,218	13,439	14,328	14,828	15,866	45%
Secretarial Studies	1,431	1,499	1,574	1,621	1,785	5%
Hotel and Tourism	3,662	3,845	3,428	3,553	3,695	11%
Media and Applied Arts	3,000	3,150	3,307	3,406	3,508	10%
Paramedical	340	357	375	386	394	1%
Aviation	102	120	147	151	154	0%
Craft Programmes	7,602	7,853	8,140	8,251	8,416	24%
Advanced Certificate/ Technical Programmes	4,567	409	494	511	527	2%
Diploma/Technologist Programmes	477	501	510	526	566	2%
Total	**33,399**	**31,173**	**32,303**	**33,233**	**34,911**	**100%**

Source : TEVETA Annual Report, 2012.

The majority (94 per cent) of student intake at TEVET institutions under MHE are trained at Level 4 and above. More than half of the total intake in public TVET institutions attend craft certificate and certificate (Level 4). Craft certificate offers a

variety of trades related to engineering, while certificate provides training in areas such as agriculture, secretarial and office management, and computers.

Diploma level (Level 6) has the second largest intake in public TEVET institutions, and provide programmes with similar features than those offered by craft certificate. Advanced certificate (Level 5) accounts for 15 per cent of the intake at public institutions and offers relatively homogenous programmes. The majority of the intake (near 80 per cent) is engineering related (see *Table 23*).

Table 23 Share of intake at public/Government TEVET institutions by NQF Level, 2013

Level 4				Level 5		Level 6	
Craft Certificate	%	Certificate	%	Advanced certificate	%	Diploma Level	%
Automotive electrical/ mechanics	29	Agriculture	29	Heavy equipment repair	35	Electrical engineering	14
Electrical engineering	31	Secretarial and office management	27	Electrical engineering	25	Science laboratory	12
Mechanical fitting, mechanical fabrication, plumbing and sheet metal	20	Computers	14	Mechanical engineering	15	Automotive technology	7
Others	20	Others	30	Secretarial and office management	15	Journalism	8
				Others	10	Physiotherapy	6
						Radiography	6
						Others	47

Source: TEVETA Data Source 2014 (not published).

Labour market characteristics and employment policies

Policies in TEVET are primarily geared at addressing the needs of national economy, in terms of employment and enhanced productivity. While Zambia's economy has experienced a sustained GDP growth of above 6 per cent annually over the last decade, this has still to be translated into effective employment generation, particularly for the growing youth population.

Basic information on labour market

High labour market participation, but weak skills and limited paid employment

According to the 2012 Labour Force Survey, the adult population aged 15 years and above (working-age population) was estimated at a total of 7,861,259 persons, representing 54.7 per cent of the total population (14,365,719) in 2012. Of the total working-age population, 75.9 per cent (5,966,199) were in the labour force (i.e. economically active) while 24.1 per cent were economically inactive. Males and females represented, respectively, 48.4 per cent and 51.6 per cent of the economically active population. Of the economically active population, 5,499,673 (92,2 per cent) were employed, with the majority (52.2 per cent) working in the agricultural sector.

Table 24 Percentage distribution of employed population (15 years and older) by level of education and employment status, Zambia 2012

Educational Attainment	Total Employed Population		Status in Employment					
	Number	Per cent share	Total	Paid employees	Apprentices/ Interns	Employers	Self employed	Unpaid family workers
Total	**5,499,673**	**100.0**	**100.0**	**20.4**	**0.3**	**0.3**	**44.2**	**34.8**
Nursery	12,979	0.2	100.0	8.6	0.0	0.0	49.7	41.8
Grades 1-7	2,401,956	43.7	100.0	9.7	0.2	0.1	49.1	40.9
Grades 8-12	2,024,760	36.8	100.0	31.7	0.5	0.4	41	26.4
A Levels	34,448	0.6	100.0	68.5	2.3	1.2	19.2	8.8
Certificate/ Diploma	201,439	3.7	100.0	77.4	0.3	0.6	16.3	5.4
Degree	30,389	0.6	100.0	80.8	1.0	3.1	7.2	7.9
None	793,703	14.4	100.0	5.2	0.1	0.1	47.2	47.3

Source: CSO, Labour Force Survey Report (LFS) 2012.

In terms of education attainment, the results of 2012 LFS showed that 6.8 per cent of the population aged 15 years and older received skills training while 92.5 per cent did not receive any skills training. Gender-wise, 10.0 per cent of the male population received skills training compared to 3.7 per cent for females. It was estimated that 8.6 per cent of the employed population received skills training while 90.9 per cent did not receive any skills training.

Of the total employed population, 44.2 per cent were self-employed, 34.8 per cent were unpaid family workers, 20.4 per cent were paid employees while interns and apprentices collectively accounted for less than a per cent (0.6 per cent).

The under-employment was estimated at 10.2 per cent of the employed population, with more prevalence in the rural areas (13 per cent) and among males. It is important to note that 70 per cent (5.5 million) of people out of the working age population were employed, the majority of them (61.7 per cent) in rural areas. A large proportion of these workers (52.2 per cent) were in the agriculture, forestry and fishery industries, while the lowest proportion was real estates and activities of extra-territorial organizations and industries at 0.1 per cent each.

In 2012, the unemployment rate was estimated at 7.8 per cent of the total labour force, showing a decline from 15 per cent in 2005 and 7.9 per cent in 2008. Females accounted for 60.8 per cent of the unemployed population. The unemployment rate was highest in urban areas at 14.2 per cent, compared to 3.3 per cent in rural areas. The highest unemployment rate was found among young people in the age group 20-24 years, with 14.3 per cent followed by the age group 15-19 years with 12.3 per cent. The youth (15-35 years) unemployment rate was 10.0 per cent. It was observed that, overall, the unemployment rate decreased with increase in age. *Table 25* below presents unemployment rate by age-group, sex and rural/urban location.

Table 25 Youth (15-35 years) unemployment rate by age-group, sex and rural/urban, Zambia 2012

Age Group	Youth Labour Force	Unemployment Rate								
		Total			Rural			Urban		
		Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	**3,594,079**	**10.0**	**8.5**	**11.3**	**4.4**	**3.8**	**4.9**	**17.2**	**14.3**	**19.8**
15-19	601,141	12.3	11	13.3	6.1	6.1	6.1	25.6	21.8	28.5
20-24	992,899	14.3	13.9	14.5	5.8	5.6	6.1	25.8	24.7	26.7
25-29	976,219	8.8	6.9	10.5	3.6	3.1	4.0	14.7	11.1	17.8
30-35	1,023,819	5.6	4.3	7.0	2.5	1.4	3.5	9.0	7.25	11.1

Source: CSO, Labour Force Survey, 2012.

The illiteracy rate of the unemployed population was estimated at 16.7 per cent, with 12.4 and 19.5 per cent for unemployed male and female respectively. People having Grades 8–12 accounted for the highest proportion of the unemployed population (58.8 per cent), followed by those who attained Grades 1–7 (28.5 per cent). People who attained "A" levels, certificates and degrees collectively accounted for 4.7 per cent of the unemployed population.

A labour market dominated by the informal sector

In 2012, the formal sector accounted only for 15.4 per cent of the employed population, compared with 84.6 per cent in the informal sector. While it shows a decrease, from 90 per cent observed in 2008, the informal sector still dominates the labour market in Zambia. Females represented 54.9 per cent of informal sector employed, while the formal[10] sector is dominated by males, who accounted for 71.2 per cent of the total employed. The most predominant occupation in the informal sector was skilled agricultural, forestry and fishery, accounting for 98.3 per cent while the lowest was professionals at 9.5 per cent. The highest percentage share of population employed in the formal sector was found in educational industry (16 per cent), while the lowest share was the real estate industry at 0.2 per cent.

In terms of educational level attained, the informal sector is clearly less endowed than the formal sector. In fact, 48.9 per cent of the employed population in the informal sector had attained Grades 1–7; 32.8 per cent attained Grades 8–12; 1 per cent had obtained certificates, and 16.7 per cent had no education. While in the formal sector, 58.7 per cent of the persons employed had attained Grades 8-12; 18.5 per cent had certificates, and only 2.2 per cent had no education.

The informal sector is mostly constituted of private businesses/farms (52.5 per cent) and private households (47.2 per cent). The agriculture industry accounted for 59.9 per cent while non-agricultural industries had 40.1 per cent. Within the formal sector, the private businesses accounted for 57.6 per cent and the central government for 28.1 per cent of total employment.

10 The definition of the formal sector in the 2012 Labour Force Survey combined the concepts of formal production units and formal employment. Formal sector employment was defined as employment where the employed population were in either a registered business unit and/or was in central government, local government and parastatal, regardless of whether they were formally engaged or not.

Table 26 Percentage distribution of employed population (15 years and older) by industry and employment Sector, Zambia 2012

Industry	Total Employed Population		Employment Sector			
			Formal		Informal	
	Number	%	Number	%	Number	%
Total	**5,499,673**	**100**	**847,420**	**100**	**4,652,253**	**100**
Agriculture, Forestry and Fishing	2,872,331	52.2	87,42	10.3	2,784,911	59.9
Mining and Quarrying	88,251	1.6	67,608	8.0	20,643	0.4
Manufacturing	21,666	3.9	73,814	8.7	142,846	3.1
Electricity, Gas, Steam and Air Conditioning Supply	12,211	0.2	11,172	1.3	1,039	0.0
Water supply Sewerage, Waste Management and Remediation Activities	1,479	0.3	6,231	0.7	8,559	0.2
Construction	187,906	3.4	36,676	4.3	15,123	3.3
Trade, Wholesale and Retail Distribution	645,571	11.7	110,365	13.0	535,206	11.5
Transportation and Storage	137,301	2.5	61,797	7.3	75,503	1.6
Accommodation and Food Service Activities	62,671	1.1	29,574	3.5	33,097	0.7
Information and Communication	42,104	0.8	15,895	1.9	26,208	0.6
Financial and Insurance Activities	14,941	0.3	12,615	1.5	2,326	0.0
Real Estate Activities	7,257	0.1	204	0.2	5,217	0.1
Professional, Scientific and Technical Activities	19,378	0.4	11,561	1.4	7,817	0.2
Administrative and support services	57,801	1.1	42,507	5.0	15,294	0.3
Public Administration and Defence, Compulsory Social Security	6,075	1.1	55,857	6.6	4,893	0.1
Education	150,215	2.7	135,471	16.0	14,745	0.3
Human Health and Social Work	6,218	1.1	52,552	6.2	9,628	0.2
Arts, Entertainment and Recreation	10,267	0.2	4,314	0.5	5,953	0.1
Other Service Activities	11,055	2.0	18,836	2.2	91,713	2.0

Industry	Total Employed Population		Employment Sector			
			Formal		Informal	
	Number	%	Number	%	Number	%
Activities of Household as Employers	722,524	13.1	7,098	0.8	715,425	15.4
Activities of Extraterritorial Organization and Bodies	4,016	0.1	4,016	0.5	–	–

Source: CSO, Labour Force Survey, 2012.

It is striking to note that the total number of formally[11] employed persons (625,305) accounted only for 11.4 per cent of the employed persons, who were mainly concentrated in Copperbelt Province (23.6 per cent) and in Lusaka Province (20.1 per cent). With 20.5 per cent of formally employed individuals, education industry had a relatively higher percentage share, compared to other industries in terms of formalization of employment. Mining and quarrying industry ranked second with 10.4 per cent while the lowest was real estate industry with 0.1 per cent.

Income for paid employees

In 2012, the national average monthly income was estimated at K1,724,106, with males' income (K1,981,661) being higher than that of female (K1,245,157) employees. The average monthly earnings in rural areas were K1, 486,703, lower than the urban areas average earnings of K1,969,503.

The highest average earnings were found in real estate activities (K5,481,340), followed by financial and insurance activities and mining and quarrying at K5,071,611 and K4,654,781, respectively.

The level of education attained determines significantly workers' remuneration level, as depicted in the table below. Degree holders earned a monthly average of K7,920,673 while those without any education earned the lowest with a monthly average of K1,235,869. Overall, males' earnings are higher than those of the females, regardless of the education status, except for those with no education, where females had higher earnings.

11 For the purposes of the 2012 Labour Force Surveys, 'formal employment' is the one satisfying any of the following attributes, in addition to having an entitlement to social security: (i) entitlement to an annual paid leave; (ii) membership of a trade union; (iii) payment of income tax; (iv) written contract with the employer(s).

Table 27 Average monthly earnings (ZMK) for paid workers by education level attained, sex and rural/urban, Zambia 2012

Status in Education	Paid Employees/ Apprentices	Total			Rural			Urban		
		Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	**2,864,498**	**1,724,106**	**1,981,661**	**1,245,157**	**1,486,703**	**1,740,386**	**964,026**	**1,969,503**	**2,249,628**	**1,499,449**
Grades 1-7	1,212,581	1,332,599	1,687,496	741,749	1,516,056	1,863,371	823,746	935,802	1,214,609	614,147
Grades 8-9	623,449	1,248,075	1,375,578	954,946	1,331,887	1,405,314	1,105,358	1,175,454	1,345,472	864,741
Grades 10-12	784,183	2,310,001	2,386,424	2,114,940	1,896,045	1,966,153	1,665,988	2,461,610	2,554,728	2,243,356
A level/ College Student	29,981	2,770,445	3,173,415	2,027,969	2,201,448	2,248,000	2,069,736	2,932,919	3,487,150	2,019,723
Certificate/ Diploma	179,512	3,614,746	3,813,126	3,293,632	2,515,739	2,621,678	2,314,257	3,823,885	4,056,316	3,458,750
Degree	27,188	7,920,673	8,324,340	6,100,151	4,596,137	4,596,137	–	8,426,482	9,041,532	6,100,151
None	7,604	1,235,869	1,228,733	1,243,051	1,471,013	1,392,093	1,566,951	507,855	449,144	540,304

Source: CSO, Labour Force Survey, 2012.

In relative terms, the average earnings of Degree holders represent 4.59 times the national average monthly income (1,724,106), while the average earnings of employees with no education equated only 0.72 times the national average monthly income.

Demand for and supply of labour

Available data suggest that the labour market in Zambia is severely demand-constrained. The biggest employer is the government, through the recruitment of civil servants in the education sector (teaching and administrative staff), the health industry (nurses), the police force and other government extension officers. But the recruitment by the government is far from meeting the huge demand for labour, especially given the growing population of youth seeking employment. Besides, access to the government's jobs has proved to be difficult, due to nepotism and corruption in recruitment in the public service (UNCDF, 2015). More generally, according to the Revised SNDP (2015), the challenges related to the demand for labour include: (i) low manufacturing and industrial base, weak forward and backward linkages within the economy; (ii) low levels of economic diversification and productivity; and (iii) inadequate investments in areas of high potential for employment generation.

While a number of industries are flourishing in the private sector, particularly in the area of construction, extractives and agriculture, their current demand for labour is not yet enough to help mitigate significantly the unemployment challenges.

On the supply side, a survey by UNCDF suggested that youth's employment profile does not match the demand of the labour market, particularly with regard to the technical and soft skills required to perform entry-level jobs in Zambia. This can be attributed to a number of factors, including: mismatch between education/training and the needs of the labour market; limited access to training in life skills and business support; lack of prior work experience, often required by employers (about 55 per cent of employers in Zambia). In addition, one out of three employers (33 per cent) interviewed mentioned high turnover in their companies as the single highest barrier to youth employment (UNCDF, 2015).

The reality described above makes it easy to understand why entrepreneurship emerges as an important potential alternative for youth's self-employment in Zambia. In fact, it is estimated that about a quarter of the youth population operate business in various sectors, most commonly wholesale and retail trade, agriculture, livestock and fishing. Though, accessing capital is a major and persistent barrier that limits youth's ability to effectively start a business. It is found that the agriculture sector presents the easiest transition for job creation opportunities, particularly as farming is widely practiced and is the main occupation of Zambians, accounting for 68 per cent of the population's activities. However, while there are opportunities for youth to exploit value addition as a way to enhance their skills and earn an income within the sector, there is a need to improve youth's perception of the agriculture industry in order to make it more attractive.

Recent trends in labour force and youth employment

With the growth and changing structure of the Zambian economy during the last two decades, there has been also a growth in the size of the workforce, accompanied by an increasing share of the more educated workers. *Table 28* shows that, while the proportions of workers with no education and those with Grades 1-7 decreased between 2005 and 2012, a notable increase was observed in the proportions of workers with Grades 8-12 and those with post-secondary degrees and certificates. This trend, which is in line with the remarkable development of the Zambia's education system, is also an indication of the demand for qualifications by both individuals and firms. This also confirms a positive labour market outcome of increasing education opportunities.

Table 28 Number and share of workers by education level, 2005-2012

	2005	2012
Total number of workers (in millions)	41	55
Workers with no education	16.7%	14.7%
Workers with Grades 1-7	49.8%	43.7%
Workers with Grades 8-12	32.7%	36.8%
Workers with post-secondary degrees and certificates	0.8%	4.4%

Source: World Bank, 2015.

The growth of the labour force was also accompanied by a remarkable shift of workers from agriculture to the service sectors (see *Table 29*). This is likely due to the increased labour productivity in agriculture (5.5 per cent per year), which pushed redundant workers out of agriculture and forced new entrants to seek jobs in other sectors. The current fastest growing sectors – construction; transport, storage and communication; and social and personal services (with 14.1 per cent, 18.2 per cent, and 12.2 per cent growth per year, respectively) – also experienced largest growth in labour force (22.5 per cent, 12.6 per cent, and 26.8 per cent, respectively). It was observed that the proportion of non-educated workers is increasing in these sectors; the influx of workers from agriculture has resulted in slowing labour productivity growth.

While the trends described above suggest growing employment opportunities, particularly for educated labour force, it is striking to note that youth (15-24 years) unemployment rate (14 per cent) is twice as high as that of the rest of the adult population (25 and above). And, as illustrated in *Figure 25*, this situation is highlighted in the last three labour force surveys. It should be noted also that the increasing opportunity for post-basic education can partly explain the high rate of unemployed youth.

Even if available data indicate that the unemployment rate is relatively low among post-secondary and university graduates, the issue of persistent youth unemployment needs to be rigorously addressed, including by questioning the adequacy between skills provided by the training system and the employers' requirements.

Table 29 Trends in the composition of labour force by economic sector/industry, 2005-2012

		2005		2008		2012	
Sector	Industry	%	thousands	%	thousands	%	thousands
Primary	Agriculture, forestry, and fishery	72.3%	2,964	71.4%	3,284	52.2%	2,871
	Mining and quarrying	1.4%	57	2.0%	92	1.6%	88
Secondary	Construction	1.3%	53	1.7%	78	3.4%	187
	Electricity, gas and water	0.4%	16	0.3%	14	0.5%	28
	Manufacturing	4.0%	164	3.5%	161	3.9%	215
Tertiary	Finance	1.0%	41	0.4%	18	0.4%	22
	Sales, trade, hotels and restaurants	10.5%	431	9.2%	423	12.9%	710
	Social and personal services	7.0%	287	8.4%	386	21.8%	1,199
	Transport and communication	2.1%	86	3.0%	138	3.3%	182
	Total	100%	4,100	100%	4,595	100%	5,500

Source: World Bank, 2015.

Figure 25 Trends in labour force participation rate and unemployment rate, by age groups (2005, 2008, and 2012)

Source: World Bank, 2015.

Policy measures addressing issues of youth employment

As discussed earlier, since its independence, Zambia has constantly taken steps to improve its training systems and pathways to align them with the skills required by the economy, particularly with regard to the competencies needed by the strategic and growth sectors. While the 1996 TEVET policy remains the main reference framework in this area, it has been reinforced by a number of recent policy level mechanisms geared at improving the processes of school-to-work transition or youth employment. These include the following:

(i) *The introduction of a vocational training career stream in the secondary school*: started in 2014, this initiative aims at enabling young people leaving school at Grade 9 and Grade 12 respectively to be assessed and certified for award of Trade Certificates by TEVETA, based on practical skills subjects they would have studied, in addition to Junior and Senior Secondary school leaving (academic) certificates.

(ii) "*My Job + 1" Business Challenge programme*: this is a programme launched by the MESVTEE in 2014, with the objective to promote the entrepreneur/employer career pathway. It consists of an open learning-based annual entrepreneurship skills competition. One of its success criteria requires participants to create at least two jobs, one for the entrepreneur/investor team and one for another youth. TEVETA has partnered with a number of private and public sector stakeholders to run and sponsor the competition. The long-term goal is to equip youth with skills which help them lead and drive job creation through deployment of their entrepreneurship, innovation and servant leadership talents.

(iii) *The Youth Development Fund*: is a Government programme, under the Ministry of Youth and Sport, with the overall objective "to lend finance to viable projects by the young entrepreneurs as well as enable the youth benefit from associated training and mentorship services. The Youth Development Fund is therefore aimed at supporting the growth of sustainable youth-led SMEs into the private sector for wealth and employment creation" (MYS, 2012). The Fund has two disbursement facilities, namely loans and grants. For the year 2012, about US$ 2 million was allocated by Parliament, broken down as follows: US$1,378,192 for loans and US$652,800 for grants.

(iv) *The 2015 revised National Youth Policy and the National Action Plan on Youth Empowerment and Employment (2015-2020)*: launched in August 2015, aim to create more than 500,000 jobs for the youth by the end of 2016. Based on a critical review of the previous employment strategies, they squarely place youth at the centre of national economic development and provide a more effective youth empowerment and employment Strategy to address the identified challenges in a more systemic and

coherent approach. To serve this purpose, it is intended that they simultaneously promote strategies for expanding the growth of the formal sector, for creating a youth employment-friendly policy environment, for improving equality and inclusion (gender, people with disability and those living with HIV and AIDS), for enhancing youth participation in the formal labour market through acquisition of employable skills, and for enhancing the performance of intermediation mechanisms.

Despite this commendable effort, the implementation of these national youth policies and action plans are hindered by lack of resources. In fact, the immediate macroeconomic issues, i.e. a recent drop in the price of copper, coupled with currency fluctuations, have prompted the government to shift course away from job creation for youth and toward macroeconomic efforts to diversify the sources of exports (UNCDF, 2015).

Private investment and entrepreneurship opportunities and challenges

According to Doing Business 2016, which measures and compares business regulatory quality and efficiency for domestic firms in different countries, Zambia is ranked 97 out of 189 economies. The Doing Business 2016 ranking is based on 10 topics, including starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.

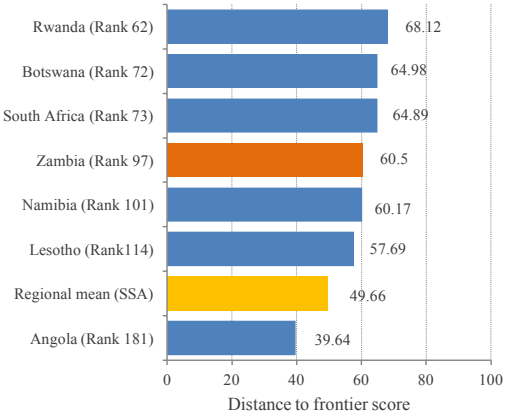
Table 30 Zambia's Doing Business rankings and distance to frontier score, 2015 & 2016

	Rank	Change in rank	DTF	Change in DTF
Doing Business 2016	97	-6	60.5	-0.19
Doing Business 2015	91		60.69	

Source: World Bank, 2016.

Note: Doing Business presents results for 2 aggregate measures: the distance to frontier score and the ease of doing business ranking. The ease of doing business ranking compares economies with one another; the distance to frontier score benchmarks economies with respect to regulatory best practice, showing the absolute distance to the best performance on each Doing Business indicator. When compared across years, the distance to frontier score shows how much the regulatory environment for local entrepreneurs in an economy has changed over time in absolute terms, while the ease of doing business ranking can show only how much the regulatory environment has changed relative to that in other economies.

Figure 26 How Zambia and comparator economies rank on the ease of doing business



Source: World Bank, 2016.

When compared with neighbour countries, Zambia is doing relatively well both in terms of ease of doing business ranking and DTF score. As shown in Figure 26, the Zambia's DTF score (60.5) which is slightly higher than the median value of the sample (60.33), stands well above the sub-Saharan African average (49.66). Its doing business ranking (97) also represents the median value of the sampled countries.

The figures below depict Zambia's positions with regard to rankings and distance to frontier scores on the 10 Doing Business topics.

Figure 27 Rankings on Doing Business topics – Zambia

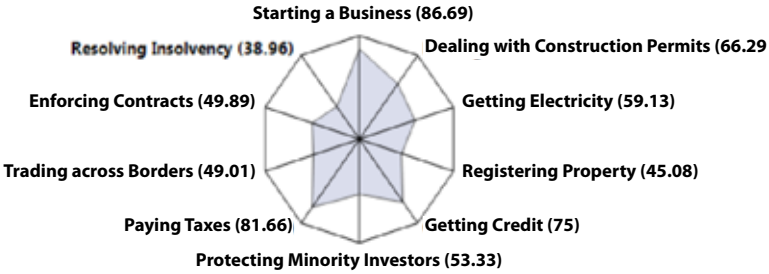
(Scale: Rank 189 centre, Rank 1 outer edge)

Source: World Bank, 2016.

This figure shows that Zambia's rankings are particularly poor in: (i) registering property (157/189); (ii) trading across borders (152/189); (iii) enforcing contracts (134/189); (iv) getting electricity (123/189); (v) dealing with construction permits (110/189), and (vi) resolving insolvency (107/189) where its ranks are higher than the average of 97.

As for the distance to frontier score, the main challenges lie on: (i) resolving insolvency (38.96); (ii) registering property (45.08); (iii) trading across borders (49.01); (iv) enforcing contracts (49.89); (v) protecting minority investors (53.33), and (vi) getting electricity (59.13) where the scores are below the Zambia's average of 60.5.

Figure 28 Distance to frontier scores on Doing Business topics – Zambia



(Scale: Score 0 centre, Score 100 outer edge)

Source: World Bank, 2016.

Note: The distance to frontier score benchmarks economies with respect to regulatory practice, showing the absolute distance to the best performance in each Doing Business indicator. An economy's distance to frontier score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 the frontier.

Key policy Issues

Against the background described above, the desk review and meetings with the different stakeholders highlighted the following major TEVET issues as needing urgent attention:

- Limited and inequitable access to TEVET;
- The roll-out of the two-tier system being introduced by the Zambian authorities;
- Lack of funding of TEVET;
- Unresponsiveness of TEVET to the labour market;
- Curriculum development not relevant to the labour market;
- Lack of quality trainers;
- Weak quality of training offered.

It is interesting to note that more or less the same issues were highlighted at the Third International Congress on TVET held in Shanghai in May 2012. The above issues were discussed with relevant TEVET stakeholders met during the review mission. They were also presented at a wrap-up meeting on the last day of the Zambian mission in the presence of Ministry's officials and different partners, who contributed with observations and suggestions included in this final report. These policy issues are analysed below and a set of recommendations is proposed.

Policy issue 1: Limited and inequitable access to TEVET

The current TEVET enrolment represents only 2.2 per cent of the population aged 15-24 years, and the prevailing TEVET system accommodates only 4.6 per cent of its potential demands, consisting of some 300,000 youths leaving school at Grade 9 and Grade 12 every year.

Evidence

The revised Sixth National Development Plan (SNDP) notes the importance of TEVET in addressing Zambia's principal labour market and socio-economic challenges and contributing to economic and income growth, poverty reduction, employment, productivity, and human development. According to TEVETA, there were 290 registered TEVET institutions in March 2015, including 87 public institutions. Total annual enrolment in registered TEVET institutions reached 45,000 in 2015, up from 34,911 in 2012, an increase of 29 per cent, which is significant, but limited when considering the potential demand.

To put the annual intake into perspective, it should be noted that some 300,000 young people leave school at Grade 9 and Grade 12 every year. The prevailing TEVET system can only accommodate approximately 14,000 students annually, who represent only 4.6 per cent of potential participants. In Zambia, TVET's total enrolment as percentage of population aged between 15-24 years stands at 2.2 per cent, well below the average of high performer SADC countries, such as Botswana (30 per cent), Mauritius (21.7 per cent), Seychelles (4.5 per cent), South Africa (3.9 per cent). *Table 31* presents detailed information on TVET enrolment in the SADC countries.

The need to increase TEVET enrolment was then reflected in the TEVETA strategic plan for 2014–2016 which targeted an annual enrolment of at least 154,000 learners by December 2016 through promotion and/or development of the following seven training systems or pathways: (i) training in secondary schools; (ii) training in TEVET institutions; (iii) on-the-job training or workplace-based training; (iv) dual mode training (TEVET learnership scheme, involving both institution- and workplace-

based training); (v) open, distance, and flexible learning; (vi) recognition of prior learning (RPL) assessments, and (vii) TEVET access/foundations/bridging courses. From the current enrolment of 45,000, achieving the above target will be difficult, given an estimated annual intake of 14,000 learners. Key performance indicators in the revised SNDP suggest an annual TEVET enrolment of 66,000 by 2016, which is a more realistic ambition. Nevertheless, Zambia's acknowledgement of the need to improve uptake of TEVET is important.

Table 31 Overall TVET providers and enrolment in the SADC countries

Country	No. of TVET providers (including formal and non-formal)	Total enrolment, including public and private TVET institutions	% of female enrolment	% of TVET enrolment per population aged 15-24 years
Botswana (2006)	202	31,000	–	30%
DRC (2006)	Unknown	755,035	–	n.a.
Lesotho (2010)[1]	69	3,457	41%	1%
Malawi (2010)[3]	254	4,164	34%	0.2%
Mauritius (2010)[4]	576	44,294	–	21.7%
Mozambique (2010)	68	46,082	–	1.2%
Namibia (2008)	15	6,612	39%	n.a.
Seychelles (2010)[2,3]	23	1,699	47%	4.5%
South Africa (2010)[1]	914	340,583	–	3.9%
Swaziland (2006)	57	2,858	45%	1.2%
Tanzania (2010)[1]	889	177,749	43%	2.2%
Zanzibar (2009)[2]	30	2,894	25%	1.5%
Zambia (2010)[1]	276	33,399	41%	n.a.
Zambia (2013)[5,6]	275	34,911	45%	2.2%
Zimbabwe (2010)[1,3]	57	13,217	44%	0.5%

Source: UNESCO & SADC, 2013.

Notes:
1. Enrolment data are for 2009.
2. Enrolment data are for 2010.
3. Enrolment data refer to public TVET institutions only.
4. Enrolment data refer to levy funded learners for 2008-2009.
5. Enrolment data are for 2012.
6. These data were not in the original table. The indicators are derived from the TEVATA database.

Low training capacity and poor public perception have been identified as the main barriers to access to TEVET. Almost all training institutions operate below their capacity with trainee to instructor ratios well below the prescribed norm of 20:1. Trade schools fail to attract young people because traditional artisans, such as brick layers and carpenters are looked down upon, although Zambia experiences a major shortage of such skills (Commonwealth, 2016). In his speech at the launch of the TEVETA strategic plan 2014-2016, the Minister of Education pointed out the paradox between the severe space constraints experienced at upper secondary education and the notable low enrolment in trades training institutions. Zambia's authorities also acknowledge that the challenge for TEVET concerns how best to provide opportunities and diversity of training pathways in order to accommodate the increasing number of school-leavers, as well as existing out-of-school youth. The current TEVETA strategic plan 2014-2016 strives to address this challenge by promoting and implementing seven training and learning systems or pathways for pursuing TEVET.

Other barriers to participation in TEVET include the minimum academic requirements for entry (Grade 9 or Grade 12 completion) and the progression from certain programmes, as there are no institutions that offer higher-level TEVET qualifications. The latter tends to deter interested candidates from upgrading their skills. The Zambian Government has sought to address the challenge by merging three Luanshya-based institutions into a single polytechnic that can offer higher-level qualifications (NIF III, 2011–2015).

Efforts to address the access challenges are being addressed by encouraging the involvement of various stakeholders in training provision and promoting distance learning. Distance learning, however, is provided by only 2 per cent of registered institutions. The ministry, TEVETA, and the Technical and Vocational Teachers College (a leading provider of distance learning among TEVET providers in Zambia) have planned various strategies to promote distance learning with TEVET providers. Recognition of prior learning is seen as another way of increasing access to TEVET institutions among the disadvantaged people.

Equity issues also remain fundamental in TEVET, since many low-income families cannot afford to pay excessive fees. Furthermore, the existing training institutions are concentrated in Lusaka, Copperbelt and Southern Provinces, which adds to the costs for prospective trainees who rely on boarding facilities, yet often with limited capacity with regard to the needs. According to NIF III (2015), some efforts have been made in the past decade, through different TEVET and youth policies, to extend access to female and socially disadvantaged youth. While these efforts resulted in an increase in the proportion of socially disadvantaged learners, from 8.5 per cent in 2003 to an

estimated 18 per cent in 2008, and a 25 per cent increase in the number of female graduates from TEVET programmes between 2002 and 2008, much still remains to be done to achieve equity. Though, female enrolment in TEVET programmes has notably improved from 40.6 per cent in 2008 to 45 per cent in 2012. Lower-level enrolment amongst females is particularly prevalent in engineering and technical programmes. Furthermore, the TEVET sub-sector still faces challenges in terms of inclusiveness, due to the lack of accessible physical infrastructure for people with disabilities, the inadequate number lecturers with specialized skills for training people with disabilities, and inadequate financial support for gifted learners unable to pay fees (NIF III, 2011–2015).

Discussion

In light of Zambia's development context and vision, the expansion of the TEVET system is a rational policy choice both from economic and equity points of view (World Bank, 2015).

While Zambia needs qualified labour force to achieve its vision to become a prosperous middle income country by 2030, the 2012 Labour Force Survey showed that only 6.8 per cent of its active population received skills training, and that 92.5 per cent did not receive any skills training. At the same time, available data suggest that graduates of TEVET institutions tend to perform better than secondary education completers in the labour market. According to World Bank (2015), 63 per cent of TEVET graduates have professional occupations while secondary school graduates are hardly ever employed in professional occupations. Furthermore, returns to TEVET are important. For instance, annual tuition fees of TEVET graduates in mechanic trade amount to merely three to four months of their future expected salaries. This means that, even when the opportunity cost of the training is taken into account, the cost of TEVET can be recovered in a relatively short time. In comparison with secondary education, the earnings of TEVET graduates are almost double of those of secondary school completers (World Bank, 2015).

On the equity side, available data suggest that TEVET contributes to lower gender disparity in the formal sector employment. In fact, it was observed that, among employed males, 31 per cent with secondary education work in the formal sector, while those with certificate have a much higher chance to work (78 per cent) in the formal sector. The contrast is even starker for females, since only 16 per cent of females with secondary education work in the formal sector, compared to 77 per cent of females with certificates. It is therefore critical to support students from poor families to access and complete TEVET courses, so as to provide them with future opportunities to get relatively stable jobs and increased earnings, as well as a chance to significantly improve their socio-economic status.

If Zambia is to become 'a prosperous middle-income country' as per its Vision 2030, it is important that the country increases massively the number of learners in its education and training system, while eliminating inequities of access.

The need to increase access to TEVET is critical and demands innovative approaches. Different means have been explored in different countries to increase TEVET enrolment. It is important, however, that the poor public perception of TEVET is challenged from the outset. Lessons from German experience can be useful to improve TEVET's image in Zambia. The success of German economy is largely sustained by its highly skilled workforce, due to investment in TVET by industry. Also, in Germany, blue collar is not a stigma, rather skilled workers enjoy high level of social appreciation.

Mauritius has introduced a modified version of the German dual apprenticeship mode of training since 1996 and it has proved to be the most effective delivery mode as practically all the graduates are employed before completing the training programme by the same companies where they had their training.

The Government of Zambia has an important role and should find ways to improve public opinion of the role of TEVET and underline the essential role it plays in promoting economic prosperity and social cohesion. Awareness can change people's mindset and help them develop a better opinion of TEVET. The public profile and attractiveness of TEVET must be raised among learners, families, and all other stakeholders, including through the media, informing them of the possibilities for progression, employment, and self-fulfillment that TEVET can offer. An effective implementation of the qualifications framework can also help to serve this purpose, as it will support the creation of pathways between academic and TEVET provision. Similarly, appropriate counselling services should be introduced to provide young people with information to help them choose their future career. TEVET should be seen as a credible alternative means of gaining access to employment and a profession, with particular attention given to potential students from the most vulnerable groups as they are less likely to enrol in education and are more likely to drop out of school. Girls, especially adolescent girls, young people from extremely poor socio-economic backgrounds, and those living in remote rural areas, face additional barriers that prevent them from attending school, as do young people with physical disabilities who need special structural facilities.

Training in the form of a traditional apprenticeship is common in certain African countries. In many countries, this is often the only means for the rural poor and the economically disadvantaged to learn a trade. If properly regulated and supported by

the government this type of apprenticeship can be very useful, particularly for the rural and urban poor.

However, it is important to note that global experience has shown that the mere expansion of TVET will not solve the problems of unemployment and low economic productivity. Therefore, TVET must respond to the competence needs of the labour market and create a competent, motivated, and adaptable workforce capable of driving economic growth and development. It is important also to realize that competitiveness depends not only on the quality of the TVET system and the level of skills development but also on other drivers of competitiveness such as institutional environment, quality of infrastructure, innovation, etc., as well as on alignment between skills development policies and industrial policies. A lack of quality TVET and/or a mismatch between supply and demand can inadvertently contribute to youth unemployment.

RECOMMENDATIONS

- Expand the delivery facilities of TEVET, particularly by: (i) promoting collaboration with employers in the delivery of TEVET by devising adequate incentives. The dual apprenticeship mode of training can be introduced on a pilot basis. Employers are very willing to take on learners provided that the necessary conditions are created and they are not compelled to recruit the learners on completion; (ii) constructing new TEVET institutions, the rehabilitation of existing ones, and ensuring the maintenance of infrastructure.
- Re-brand TEVET so that it is perceived more positively and provide pathways to further training. To achieve this: (i) Students should be well informed of the opportunities that TEVET can offer and view TEVET as an attractive pathway. Students should also have access to a variety of innovative, industry-led programmes that prepare them for the workplace. In addition, the qualifications framework should be made fully operational and appropriate counselling services should be introduced to provide young people with relevant information on existing training and their future career; (ii) Centres of excellence should be established for different trades/fields within urban areas. These centres can offer a higher level of training for those who are interested in pursuing higher-level training or upgrading their skills.
- Expand TEVET training opportunities to ensure inclusiveness and equity by: (i) promoting trade tests and recognition of prior learning for young people already at work. Many young people prefer to go directly to industry to learn a trade while earning a salary, rather than spending one to two years at school without any pay. Without opportunities for progression, they will stay where they are and will have difficulty climbing the career ladder; (ii) identifying a number of

training centres in rural areas to become leading training centres and providing them with fully equipped mobile training units that they can move from place to place, also interchanging equipment depending on the needs of these areas. This has the advantage of not requiring the learners to move to Lusaka since training facilities can be moved to where the learners are. This could support the expansion of non-formal skills training centres for uneducated adults and out-of-school youngsters in these areas. These centres could offer short-term, basic-level training courses in occupations in which these groups can easily find income-generating jobs; (iii) providing incentives to attract potential students from the most vulnerable groups as they are less likely to enrol in education and are more likely to drop out of school; (iv) revitalising traditional apprenticeship training as it is a means to improve the skills of large numbers of young people in rural sectors of the economy; (v) ensuring safety in TVET institutions and other learning settings for all students and teachers, particularly females, who are the most vulnerable group. These institutions must cater to the specific needs of the learners, particularly the needs of girls and people with physical disabilities.

Policy issue 2: The reservation about the roll-out of the two-tier system being introduced by the Zambian authorities

While Zambia is piloting the two-tier system, a number of stakeholders raise doubt about the effectiveness of such an approach in relation to the expected results, namely reduction of school dropouts, rebranding of TEVET image, increased employability of TEVET graduates.

Evidence

The two-tier system is one of the two initiatives undertaken by Zambian authorities, over the last fifteen years, in order to integrate skills training and basic education. The first of these, referred to as Basic Skills Education (BSE), promotes the acquisition within schools of pre-vocational and life skills, and the development of individual learner talents for survival, development and self-work. To achieve the objectives of BSE, the Government has established Continuing Education and Trade Skills Training Centres across the country. In 2004, more than 14,000 learners were enrolled in these centres and benefited from BSE.

In addition to the provision of the 2004 EFA policy framework, the Government has made several pronouncements on the importance of skills education and commitments to the development of a two-tier or flexible education and training programme. The two-tier system is meant to give students who drop out at various

levels the basic competencies needed to prepare them for the world of work. They will have the chance to be trade-tested by TEVETA as part of a vocationalized secondary education curriculum which remains overwhelmingly general or 'academic' in nature, but which includes vocational or practical subjects as a relatively minor portion of the students' timetable. For example, for both junior and senior secondary schools, weekly vocational contact hours are eight out of 30 (27 per cent).

The Mazabuko skills training centre, among 12 others, has been delivering a sort of two-tier education since 2009, with students able to alternate between academic and TVET courses. About 20 per cent of the students on general education courses voluntarily join in TVET courses, where four trades are taught. Grades 10, 11, and 12 students together follow these trades and, whenever they are ready, are assessed for Level 3 and Level 2 qualifications. However, no tracer studies have been carried out as to employment outcomes.

The two-tier system currently being introduced in Zambia differs from this example in a number of respects. At primary level, all students are exposed to both career pathways: academic and technical. This is to ensure every student has literacy skills in English and a Zambian language or sign language, numeracy skills, ICT skills, and life skills. Junior secondary school provides a two-year course that forms a basis for the acquisition of knowledge, skills, and values needed for subsequent formal studies at senior secondary school. The learner is equipped to pursue either academic education or prevocational and life skills education.

Those who choose the academic pathway have eight compulsory subjects plus one optional foreign language. Those opting for the vocational career pathway must choose one from five course options (agriculture, technology, performing and creative arts, physical education and sports, and home economics and hospitality). The courses combine a series of academic subjects with the selected vocational subjects. It should be noted that a single period of a vocational subject takes 120 minutes, whereas a single period for the support subject lasts 40 minutes.

Learners who successfully complete junior secondary education will be awarded a Level-3 TEVETA trade certificate and a junior secondary school certificate from the Examinations Council of Zambia (ZEC). Those who decide not to pursue tertiary education can join the labour market.

Similarly, senior secondary school learners are prepared for tertiary education and the world of work. The key competencies for learners are to: (i) communicate effectively in both speech and writing; (ii) understand, interpret, and apply mathematical,

scientific, and technological knowledge; (iii) apply the knowledge, skills, positive attitudes, and value systems of vocational and life skills in real life.

The academic pathway has three options, namely social studies, business studies, and natural sciences. Each learner has seven compulsory subjects related to the option chosen and at least one additional optional subject.

Those choosing the vocational career pathway have the same options as under the junior secondary course. Those who study vocational subjects up to Grade 10 and pass a Level 2 TEVETA trade test will be awarded a Level 2 trade certificate. A Level 1 trade certificate is awarded to Grade 11 learners who have successfully completed the Level 1 course. A word of caution is needed here: it is important to ensure that those choosing the vocational stream are not considered to be dropouts or failures of the academic stream.

It should be added that all learners are expected to be involved in the following activities, which are part of the curriculum: (i) club and associations; (ii) sports; (iii) preventive maintenance, and (iv) production unit.

The roll-out of the two-tier education system began in 2014. The target was to enrol half of the adolescents who were not enrolled in formal schools due to lack of sufficient places. As of May 2015, the two-tier system was being experienced in four training institutional hubs: (i) Lukashya Technical Training Institute (197 learners); (ii) Chipata TTI (191 learners); (iii) Mansa TTI (376 learners), and (iv) Nkumbi International College (75 learners). These institutional hubs are linked to twenty technical secondary schools and ten schools for continuing education during the pilot phase. Teachers provide instruction in academic subjects at the schools, while learners move to the training centres to develop practical skills. Some schools have also begun to deliver vocational skills training on their own campuses and can organize testing for interested learners.

During the review mission, employers expressed their willingness to take on learners, provided that necessary conditions are created and they are not compelled to recruit the learners on completion of an apprenticeship.

Discussion

The recently introduced two-tier system, if successful, can help to increase access to TEVET and its responsiveness to the labour market, as has been the case in other countries. This mode of training has proved successful in countries such as Germany and Mauritius where learners spend some time in industry and the remaining time

in a training institution. However, a proper legal framework has to be developed. Tax incentives/relief could also be provided to entice the private sector to train learners under the dual training model.

In their efforts to address the unemployment challenges, many countries strive to 'vocationalize' the secondary education curriculum in order to prepare young people for effective entry to employment and jobs (Laglo & Maclean, 2006).

Bishop (2005) explains that the introduction of vocational education options at secondary level induced students to stay longer in school and, in turn, increased the flow of occupationally trained graduates into the labour force and generated employer support for the further expansion of secondary education. That is why almost all governments in developing countries are trying to expand the provision of TVET at secondary level, while making efforts to increase secondary education enrolment in general.

However, in countries where TVET is still regarded as a second-class form of education, being reserved only for students who are less academically competent, there has been, at times, a failure to attract students to secondary level TVET programmes. It can even lead to decreased TVET enrolment at secondary level, as is the case in Lao PDR, according to a 2011 UNESCO background paper on TVET in Asia and the Pacific Region. Hence the need to rebrand TEVET, as mentioned in the policy recommendations above, to give it a new and better image.

In addition, issues related to the provision of TVET can also be seen as obstacles in expanding TVET enrolment. Clearly, TVET requires far greater investment than general education due to the necessity of specialized facilities, equipment, and materials for practical training. Due to the high unit cost of introducing and running TVET courses, TVET institutions tend to be concentrated in places where expected enrolment can be met. Lack of adequate financial resources and deficiencies in professional vocational teacher training and assessment methods can all lead to vocational courses being reduced to teaching theory rather than practice. This situation tends to result in limited accessibility to TVET for people living in remote or scattered areas or who face difficulty accessing transportation.

Vocationalized education, as it has been applied in some countries in the Asia and Pacific region, can also be seen as pre-vocational education which does not presuppose direct transition to the labour market but which, rather, aims to prepare students for intensified vocational education at a later stage. Vocationalization takes place at upper secondary level across the entire Asia-Pacific region, with the exception of Malaysia, which has introduced vocationalization at lower secondary

level for the less academically competent. This implies that students participating in vocationalized education are equipped with a relatively high level of basic skills. This can help if the student wishes to pursue further studies or continuous professional development later on.

It is hoped that the two-tier system, which has just been introduced in Zambia, will, if given the right conditions, serve as a catalyst to increase access to skills training at secondary school level. Will it reduce the dropout at the different levels of secondary level, most particularly among poor academic achievers? Will it help to improve the perception of TVET and consequently increase the employability of and demand for TVET graduates? Will it increase enrolment in TEVET? It should be noted that there are serious debates over the validity of such an approach. For example, in analysing tracer studies undertaken in developing countries in sub-Saharan Africa introducing vocationalized education, Laglo (2005) emphasized that the inclusion of a small proportion of vocational subjects in the total curriculum (e.g. between 10 per cent and 20 per cent of curriculum time) failed to show any meaningful improvement in job opportunities for participating students. According to a tracer study of Kenyan industrial education (IE), only 5 per cent of participating students had secured further training to which IE subjects were broadly relevant, while 40 per cent continued with academic education and another 40 per cent were unemployed one year after completing IE. In Kenyan industrial education, little time was allocated to vocational education in lower secondary schools, i.e. three to five classes per week (Laglo, 2005).

In Mozambique, on the other hand, Billetoft and AUSTRAL Consultoria (2005) showed that almost all technical school students were employed three years after their graduation. Such contrasting results between Kenya and Mozambique may stem from the differences in the percentage of vocational education to total education, which is between 10 per cent and 20 per cent vocational education in Kenya and between 30 per cent and 40 per cent in Mozambique, as well as from differences in labour market conditions, with a depressed labour market blighting the former and a 'buoyant' demand for skilled workers characterizing the latter.

Research conducted in economically more developed countries has also produced mixed results. Bishop (2005) found similar results by analysing panel data of upper secondary graduates who attended career-technical education (CTE) in USA, as he reported no significant effects of introductory vocational courses (general business, agriculture, distributive education and health occupations) on employment, unemployment, wage rates and earnings of either 1993–94 or 2000 graduates. In contrast, Bishop (2005) found that each additional non-computer CTE course led to higher earnings than mean earnings of 1993 and 2000, namely an increase of 4.6 per

cent and 1.4 per cent respectively. This corresponded to remarkably high benefit–cost ratios (exceeding 6 per cent) and internal rates of return (above 18 per cent).

The different experiences of African countries indicate that vocationalization policies need to be implemented through a staged approach and after a careful examination of labour market demand and the resources available at every stage in the relevant country.

RECOMMENDATIONS

- It is recommended that the pilot be carefully studied and analysed, bearing in mind labour market demand and resources available at every stage, before any decision is taken as to whether the two-tier approach should be extended to other schools.
- Provide proper and early counselling services and career guidance for students in order to help them make informed decisions, particularly during their transition from lower to upper secondary school, so that they can choose an appropriate stream according to their abilities and desires.
- Promote/Develop effective cooperation between general education schools and TEVET institutions, by ways of sharing teachers, programmes and facilities, as well as the institutional arrangements for awarding relevant certificates to those students who successfully complete vocationalized programmes. This implies permanent dialogue between government departments or ministries responsible for the concerned streams.

Policy issue 3: Lack of public funding for TEVET

The government priority given to TEVET, through different policy documents and statements, is not translated into an adequate public funding, which impedes a smooth development of this important sub-sector.

Evidence

The TEVET system in Zambia is financed through a variety of sources (the government, fees paid by learners, sale of goods and services by training institutions), yet funding remains a major challenge.

The Government provides funding for public and private TEVET institutions through the relevant ministries. According to World Bank (2015), the share of government education expenditure on TEVET is the smallest among the education subsectors, and it accounted only for 0.6 per cent in 2013 (*Tables 16* and *32*). Though, TEVET share in

the education budget was estimated at 0.7 per cent for 2014 and 1.6 per cent for 2015, the trend in actual spending during the last ten years suggests an average below 1 per cent of total education expenditure (World Bank, 2015). Also, as discussed in Section 3.1, government expenditure per TEVET student is low in comparison to other subsectors' unit cost, particularly when compared with unit spending of high school. The large difference between TEVET (ZMW1,195) and high school (ZMW2,265) unit spending, in one hand, and between TEVET and University unit spending (ZMW12,921), on the other hand, suggests that government priority accorded to TEVET is not translated into an adequate funding support (see Tables 15 and 16 in Section 3.1).

The low public funding to TEVET is explained by two main reasons. The first reason is that the trainers at TEVET institutions are no longer civil servants, and thus the cost of personal emolument, which accounts for a large share of expenditure, is not borne by the government. It should be noted that the government was paying the salaries of the trainers of all public training centres until 2000, before the dissolution of the Department of Technical Education and Vocational Training (DTEVT). Second, with the dissolution of DTEVT, the management and financial responsibilities, including revenue generation, were decentralized to management boards at institutions under a semi-autonomous structure.

The government's funding to TEVET institutions takes the form of institutional grants and competitive fund. While the institutional grants are provided to public institutions, not all of them can receive them. Despite lack of clarity on the selection process, almost the same institutions have received grants since 2006. From 2006 to 2013, the grants have more than doubled, reaching ZMW21.4 million in 2013, while the number of recipients remained almost the same, around 24 to 27 institutions. The average amount of grants per institution ranges from ZMW0.5 million to ZMW 2 million, partly depending upon the enrolment size. The Ministry does not use clear formula or criteria for resource allocation to institutions; the amount of grants seems to be mainly based on a historical trend (World Bank, 2015).

Established under the TVET (Amendment) Act No. 11 of 2005, the TEVET Fund serves as a source of funding for public and private providers. The Government provides the fund, which is consequently awarded to pre-determined training programmes at public training institutions. This fund is utilized as and when resources are available from the government. The TEVET fund aims at covering three spending categories: (i) four windows of specific training funds, namely the pre-employment training, the employer-based training, the SME/informal sector training, and the infrastructure and system development; (ii) subsidies to institutions, and (iii) student bursary. The two first components of the TEVET fund have considerably decreased over the last years, until the 'four windows' completely drained out in 2012. In 2014,

the bursary was provided to less than 1,000 TEVET students, about half of which went to those enrolled in urban institutions. To benefit from bursary, students should meet the criteria for vulnerability set by the Ministry of Community Development, Mother and Child.

Overall, the distribution of TVET fund is even more selective than that of the institutional grants. Over the past years, only six institutions (almost the same) have succeeded to receive the TEVET fund, based on institutional proposals. The total amount of the TEVET fund was ZMW8.7 million in 2012, and the allocation per institution varies between ZMW0.4 million and ZMW3.1 million. The two TEVET fundings are not cumulative; the institutions that benefit from TEVET fund usually do not receive institutional grants.

While TEVETA has had relatively good financial flows over the past years (World Bank, 2015), its budget was reduced by 5 per cent from the figure for 2014. The TEVETA revenue includes government grants, fees collected, and other services, while its expenditures consist of: (i) expenditure on activities, including TEVET fund (provided to institutions), examination, supervision, and system development; (ii) administrative expenditure, including remuneration and operating costs.

Low public funding to TEVET, in a context of persistent macroeconomic constraints, implies that TEVET institutions have to raise financial resources by themselves. A study by World Bank (2015), based on a sample of four institutions, suggests that despite low public funding, Zambian TEVET institutions, regardless of size and location, succeed, through a sound financial management, to meet their operational costs and to keep TEVET tuition and fees affordable to students. However, it should be noted that these four sampled institutions are those receiving either the institutional grants or the TEVET fund, and there is little information about those that do not benefit from any public fund or grant. Most of such institutions are small and cannot maintain healthy financial status in the medium and long run, unless they increase the tuition and fees, which is already expensive especially for students from poorer family backgrounds. While larger institutions, taking advantage of economies of scale, can meet their operation costs with students' fees and less dependency on public funds, the smaller institutions would need government financial support in order to survive.

While training fees are a significant source of funding for both public and private TEVET providers, it should be noted that fees charged by private institutions are not regulated, but public TEVET institutions need to seek approval for training fees from the corresponding ministries.

In fact, only around 10 per cent of all training centre budget is allocated as a grant from the government, which means that centres have to generate between 80 per cent and 90 per cent of their budgets through training fees. This situation is causing major problems for rural training centres where many prospective learners are unable to pay for their tuition. The repercussions are many. These centres are not able to generate enough revenue to pay and retain good-quality trainers. They find themselves having to employ relatively poor-quality trainers, which impacts on the quality of training delivered.

Funding is a major challenge even for some centres in urban areas. The manager of Lusaka's Industrial Skills Training Centre noted that demand from applicants to the centre was greater than its capacity to deliver. In fact, the ratio of student demand to intake capacity is 2:1. Unfortunately, the centre cannot expand its facilities to enrol more students because of a lack of financial resources. Nevertheless, it has responded by running short courses in rural areas when there is demand. This helps it to generate some additional revenues.

Training consulting services and work for industry are permitted but only training institutions that are located in urban areas, are credible, and have experienced trainers and facilities that can undertake such services and generate additional revenues through them. However, the benefits are marginal. For example, the Industrial Skills Training Centre generates only 5 per cent of its budget through such services, in its case, the repair and maintenance of public transport.

Training institutions in rural areas are not able to deliver these services as there is little demand and they lack the necessary facilities and human resources to engage in such activities. Instead, they must rely only on training fees, which are very low.

It is important to mention that charities and donors ensure funding for a number of community-based and faith-based TVET providers. Those organizations subsidize TVET training for socio-economically disadvantaged learners. Industry also provides funding for enterprise-based training allowing students to train directly at the workplace.

The above-mentioned funding sources are complemented by some external funding. The most recent/ongoing donor-assisted initiatives for TEVET include the following:

- The *Support to Science and Technology Education Project*: amounted USD 33 million funded by the African Development Bank (ADB), this project's objectives are: (i) the rehabilitation of facilities and the procurement of equipment at five public training institutions and three public universities; (ii) the training of 300 instructors and managers; (iii) the review of curricula for twenty-five TEVET

programmes; (iv) the enhancement of work-based and entrepreneurship skills, and some public-private pilot initiatives in the mining sector.

- The UK-funded *Skills Improvement Programme* (SKIP): amounted GBP 15 million, started in 2014 and will last six years, with the overall objective to support enhancements to the overall quality and relevance of TEVET programmes, as well as improvements in access and equitable outcomes. Around one third of the total amount should be allocated to the TEVET Fund to support training institute development, enterprise-based traineeships and the introduction of skills training for youth in the informal economy. In addition, SKIP aims at strengthening capacity within TEVETA and MHE, in-service training for managers and instructors, scholarships for girls and women and those living with disabilities, and upgrading the infrastructure at five training institutes to facilitate access for those with physical disabilities.
- A loan equipment is provided by the Chinese Government to support the re-equipment of fourteen public training institutions in order to update selected programmes and make them relevant to the needs of industry (automotive, welding, electrical and mechanical engineering), and to re-train instructors to use the new equipment.

A number of smaller donor-assisted projects are underway, including: (i) Finnida support for the construction sector; (ii) regional support for youth skills in the mining sector from the Australian Aid Programme; (iii) UNESCO's Better Education for Africa's Rise (BEAR) project, funded by the Government of the Republic of Korea, to build capacity for planning, policy formulation and a management information system; (iv) the ILO/One UN programme for Sustainable Livelihoods for Young People through the Development of Rural MSMEs, funded by the Swedish Government; (v) other ILO initiatives, including a Green Jobs programme and PROPEL (Promoting Rights and Opportunities for People with Disabilities in Employment through Legislation).

While donors' assistance helps in addressing some specific issues, public funding will need to be substantially increased if the TEVET policy objectives are to be achieved, particularly given the likely shift towards funding of a lifelong TVET concept in the near future. As pointed out by the 2014 Report of the Committee on education, science and technology, "*poor funding of the TEVET institutions and resource allocation over the years has had negative effect on staff retention and the provision of equipment and other inputs for skills training*". This view was also supported by a number of stakeholders consulted during the review mission.

Discussion

Why should Zambia increase public funding to TEVET?

With 0.6 per cent of education expenditure devoted to TEVET, Zambia spends the lowest proportion of its national education budget on TEVET in the SADC region. Other SADC countries allocate a significantly higher percentage of education funding to TEVET. In fact, Botswana (6.9 per cent), Mauritius (4.4 per cent), Mozambique (4 per cent), and Malawi (3.4 per cent) are among the SADC countries which spend more.

Like Zambia, many countries inside and outside the region have pledged to invest massively in improving the quality of TEVET as they see it as the main route to solving rising youth unemployment, the lack of skilled workers, and the escalating school dropout rates. However, Zambia, contrary to other countries, has not translated this commitment into adequate financial support to TEVET development (see *Table 32*).

Table 32 Public expenditure on TVET as % of total public expenditure/budget on education

SADC countries			Other countries		
Percentage of national educational budget allocated to TVET			TVET expenditure as a share of total Government expenditure in education		
Country	%	Year	Country	%	Year
Botswana	6.9	2009	Bangladesh	2.0	2001
Lesotho	6.0	(2003-2004)	Central African Republic	7.4	2008
Malawi	3.4	2008	Costa Rica	5.6	2005
Mauritius	4.4	2009	Gambia	2.6	2009
Mozambique	4.0	2009	Ghana	1.1	2008
Namibia	2.9	2010	Liberia (Recurrent)	8.5	2012
Seychelles	13.6	2009	Malawi (Recurrent)	3.4	2007
South Africa	2.5	2009	Pakistan	5.7	2002
Tanzania	1.4	2009	Rwanda (Recurrent)	9.6	2012
Zanzibar	2.8	2009	Sierra Leone (Recurrent)	3.4	2007
Swaziland (Recurrent)	2.4	2007	South Sudan (Recurrent)	1.1	2009
Zambia	0.7	2014	Tajikistan	3.0	2006
Zimbabwe	4.7	2009	Uganda	4.0	2004
			Yemen	0.7	2006

Sources: UNESCO & SADC, 2013; World Bank, 2015.

In many countries, the public funds devoted to TVET are derisory compared with the overall budget allocated to education, despite the fact that TVET plays an essential role in promoting economic growth and the socio-economic development of countries, with benefits for individuals, their families, local communities, and society in general. However, quality TVET is very expensive as it requires workshops of reputable standards, and that means regular investment in new equipment as well as maintenance and repair of existing equipment. This requires heavy spending, both recurrent and capital, to effectively respond to the needs of the existing labour market and to the ever-increasing technology utilization in industry. On the other hand, staff with industrial experience are expensive to recruit since the training centres must compete with private industry, which is usually able to pay these experienced professionals more. It should also be emphasized that quality TVET delivery requires a relatively low trainee-trainer ratio since high enrolment in practical, intensive programmes compromises the quality of learning outcomes, thereby increasing unit cost (Dubois and Balgobin, 2009).

It seems that in many countries, the grant provided by the government is barely sufficient to pay for the salaries of training centre staff, leaving an underfinanced TVET system with practically no funds at all for capital investment and sustained TVET development. In Mauritius, for example, the grant received from the government for 2008/09 was 97 per cent of the staff cost. Hence, the Industrial and Vocational Training Board (IVTB) had to generate additional revenue to balance its budget (Dubois, 2009).

Zambia can learn from different TEVET financing experiences around the world

Nevertheless, the necessary funding should be provided if high-quality training and investment in new projects are to be sustained in order to better respond to the needs of industry. Thus, the fundamental question is who should pay for this training. International experiences suggest that there is no single model for funding that can be applied across all countries. There has to be a blend of government funding, employer funding, fundraising, revenue generation, and so on. Financial schemes and other forms of assistance vary from country to country.

Many countries, including some SADC countries have legislated and used employer levies to fund training. In some countries, the training levy is a percentage of the wage bill. In Tanzania and Malawi, a proposed 2 per cent TVET levy on the total annual wage bill of companies proved problematic when it was first introduced. The private sector viewed the levy simply as another form of tax. In Malawi, the levy had to be reduced to 1 per cent of the total annual wage bill due to private sector resistance. In South Africa, it was 0.55 per cent of total remuneration between 1 April 2000 and 31 March 2001, and, 1 per cent from then onwards. In Zimbabwe, it is 1 per

cent for all employers with a wage bill of Z$ 2,000 per month (Durango 2002). In Mauritius, it is 1 per cent of the wage bill.

In Malawi, information, education and communication (IEC) campaigns have led to a number of private companies paying the levy voluntarily. The levy itself has also increased steadily. The private sector in general now understands the need to have a fund that is used to train the country's workforce.

The case of Mauritius is rather different. Indeed, the imposition of a training levy came from the Employers Federation. A training levy grant system was introduced in 1989 to encourage employers to invest in the training and development of their employees in order to upgrade their skills and enhance productivity. Employers paying the levy became eligible to different types of refund in accordance with the schemes (up to 75 per cent of the costs incurred) developed by the IVTB. These schemes have been revisited many times since their inception and are still being revised in order to better respond to the training needs of the country at large. Every year, some 45,000 (8 per cent of the total labour force) employees undergo training and retraining due to the prevailing training levy scheme.

On its introduction in 1989, part of the levy was utilized to finance IVTB's activities (when IVTB was created in 1988, 50 per cent of its recurrent budget and 15 per cent of its capital budget were financed from this levy. The remaining parts of the budget were financed by the government). The levy/grant management was transferred to the Human Resources Development Council (HRDC) on its creation in 2003. As a result, IVTB has been applying to the HRDC to obtain finance to balance its budget and fund some of its activities.

Other countries, such as Singapore and Malaysia, use a training levy/reimbursement scheme. In Singapore, for instance, beyond a certain salary level, employees are not eligible for funding through the training levy. On the other hand, for Malaysia, the training levy is more complex and the quantum varies according to the size of the companies and the sector concerned.

There are cases where the government offers a tax rebate for staff training. In Chile, the scheme allows firms to set training costs of up to 1 per cent of annual payroll against corporate tax payments. This would not only stimulate firms to train more, but would also have the additional benefit of making training providers more responsive to the labour market. Whilst levies can generate large amounts of money in countries with relatively large formal sectors, it is less clear how well they might function in very small countries with very small formal sectors.

Another form of funding support that is growing increasingly popular in the developing countries is the donation of equipment to technical colleges. As technology advances, companies are replacing their workshop equipment frequently. The old equipment is then being donated to technical colleges to be used for training. This form of funding is ensuring that the gap between the technology that trainees use in colleges and that used in industry is not too great.

On a per-student basis, TEVET is much more expensive to deliver than other levels of education, in particular primary and secondary. In most cases, expenditure on critical training inputs remains low as most funds are spent on salaries. The public training system still constitutes an important provider and financier of pre-employment training. However, this simple financing framework is no longer able to meet skills development needs in a context of growing resource constraints. It has become important to consider how financing can also foster increased in-service training among enterprises, greater private provision of training, and greater cost sharing with beneficiaries. There is, therefore, a role for greater involvement of employers and students in the financing of training, but this will only happen if the outcomes of the training system and its external efficiency improve. Students and firms will only be willing to participate in the financing of a system that shows demonstrable impacts in terms of efficiency and outcomes.

In many African countries, including Malawi, Madagascar, Mauritius, Nigeria, Tanzania, Zambia, and Zimbabwe, training fees have been introduced in public TVET institutions. Only in Zambia, however, fees do account for between 80 per cent and 90 per cent of training institutions' budgets. Fee income to the Mauritius Institute of Training and Development (MITD), by contract, accounts for only 9 per cent of total revenue. A grant from the government covers the staff costs. In other cases, fees are more substantial, although never at cost-recovery level. In public training centres in Tanzania, for example, fees cover about 15 per cent of recurrent costs, in Madagascar 27 per cent (Zidermann, 2003). In its recently published strategy for financing TVET, the Ethiopian Government has set a target of recovering 30 per cent of recurrent training costs through fees.

As per UNESCO's 2015 draft recommendations on technical and vocational education and training, TVET institutions, including at secondary, post-secondary, and tertiary levels, should have adequate funding for their operations, including for infrastructure, equipment, and maintenance. TVET institutions should have appropriate levels of operational and financial autonomy to enable them to engage with their local contexts, to build new partnerships for improving the quality and relevance of TVET programmes, and to generate revenue. There is a need, therefore, to spread the funding net as wide as possible, to include adequate contributions from the government, employers, development partners, training providers, students and

communities. *Table 33* shows a framework which summarizes the spread of the different kinds of contribution to TEVET funding that can be adopted.

Table 33 Potential contributions to TEVET

	Government	Employers	Trainees/ parents	TCs	Community	Development partners/ donors
Pre-employed · Public TCs	· Physical infrastructure · Equipment · Training materials · Admin costs · Staff costs	· Sponsorship of trainees · Donation of equipment · Resource persons · Corporate social responsibility (CSR)	Targeted fees	· Trainees' production and service activities		Loan/grant Expertise Technical support and advice
· Private TCs		· Sponsorship of trainees* · Donation of equipment	Targeted fees	· Physical infrastructure · Equipment · Staff costs	· Donation of land and other facilities	
In-service		Fees of employees*	Fees (self)	Fees		
Formal AS		✓	✓		✓	
Traditional AS						
Non-formal /informal training	✓	CSR	✓		✓	✓

RECOMMENDATIONS

- Government should improve funding to TEVET institutions in order for them to produce adequate number of quality skilled workers needed to achieve the country's social and economic development vision. Budget allocated must be commensurate with the number of TEVET graduates that need to be produced. In light of the international trends and the SADC average public expenditure to TVET, Zambia should increase its funding of TEVET to at least between 3 per cent and 4 per cent of its education budget.

- Government should develop and implement a mechanism for sustainable financing of TEVET. In this context, further policy discussion and, if necessary, international technical assistance would be required to revisit the current

funding system (institutional grants and TEVET Fund) to make it more transparent and inclusive. A competitive funding system can be introduced to direct the development of public and private TVET institutions in response to demand from enterprises and individuals. This can be linked to the registration of training centres. Evidently, it will have consequences in terms of changing registration requirements, from input requirements such as courses, teachers, and infrastructure, to output requirements, namely learning and labour market outcomes, measured in multiple ways, including placements, wages, and self-employment.

- Government should consider introducing a more realistic costing structure where the students pay a smaller proportion of actual training costs in public institutions. As realistic fees could exclude those who are unable to pay, Government should introduce targeted programmes, such as scholarships, reduced subsidized fees, or soft loans for learners who cannot afford to pay the fees. Training voucher schemes might be considered for students from vulnerable groups, including, specifically, those from rural areas.
- Government should explore the possibility of introducing a training levy grant scheme on a sectoral basis, as a means of building up a pool of funds to support TEVET provision. Prior consultation with employers should take place to decide on a pilot sectoral scheme. These employers could either directly sponsor the training of their employees or contribute to a training levy based on a percentage of their enterprise payrolls. In return, they can be refunded part of the training costs incurred.
- Government should provide incentives and strengthen partnerships with non-public stakeholders and industry to leverage more funding from the private sector, bring on board more private investors, and seek external grants and other contribution, such as equipment and new technologies.

Policy issue 4: Weak TEVET responsiveness to the labour market

According to many observers and employers, the quality and type of skills provided in TEVET training institutions do not match the demand from the labour market.

Evidence

While the elements of responsiveness have been clearly ingrained in Zambia TEVET strategies since the 1996 policy, and repeatedly highlighted in successive TEVET strategies included in different national development plans (FNDP, SNDP, NIF III), there are very few recent data and studies on TEVET responsiveness to the labour market.

The few available studies on TEVET responsiveness suggest mixed results. A tracer study (2004–2006) conducted by Zambia's former Ministry of Science, Technology, and Vocational Training (MSTVT) showed that 55 per cent of TEVET graduates find employment within six months of graduation, while 34.8 per cent of the graduates find employment between six and twelve months after graduation, suggesting that TEVET institutions have increasingly offered programmes that are responsive to the market demand (MESVTEE, NIF III, 2010). The findings from the 2012 Labour Force Surveys suggest that holding a post-secondary education qualification (TEVET and higher education) makes a significant difference in the employability at the formal labour market, as compared to secondary school qualification (World Bank, 2015). But this does not necessarily imply that the skills provided by TEVET match the employers' requirements.

In fact, the coexistence of high economic growth and the relatively low employment rates in Zambia (particularly among young people) suggests that, either the skills of the unemployed persons do not match the employers' requirements, or the firms cannot afford to pay the market wage rates requested by the unemployed. In the case of Zambia, both reasons have been raised by employers (Moono & Rankin, 2013).

According to stakeholders consulted during the review mission, a complaint commonly raised by both private and public sectors concerns the mismatch between skills of the workforce and the industry demands, especially in sectors such as mining, engineering and construction. This applies even for graduates from training institutions. The skill challenges, according to Moono & Rankin (2013), are inherent to poor quality of education outcomes, which begins in primary level and persists in TEVET or post-secondary education. They also state that, in addition to weak skills, the high cost of labour in Zambia encourages firms to use immigrant workers and to move away from lower-skilled labour and towards part-time or casual labour in order to lower the risks and financial burdens associated with full-time hiring.

In fact, the firms have difficulties in retaining skilled and experienced workers, especially in construction and mining sectors in both Lusaka and Copper Belt regions. The small pool of post-secondary graduates with relevant skills are over-demanded and expensive to recruit by many firms. Hence, some firms, including most multinational mining firms, expressed their preference for foreign labour, which they find more productive than the local one. The overall cost of skilled permanent labour in Zambia is high relative to foreign options and semi-skilled part-time labour (Moono & Rankin, 2013).

ZANEC (2012) reported that 'the quality and type of skills that are provided in TEVET training institutions have been an issue of concern for CSOs and other

stakeholders, as some of these skills are neither aligned to the demands of the current job market nor tailored to stimulate self-employment'. As a consequence, TEVET graduates experience a very limited employability in the labour market. It is in this context that the Government has implemented the review of skills and curricula with the aim to make them more market-driven.

According to the employers' representative to the TEVETA board, the training on offer is more supply-driven than demand-driven. They cited web design and database management as examples of areas where enrolment in training was far in excess of demand from businesses. According to TEVETA's 2013 annual report, nearly 50 per cent of learners were in business studies, for which there is little employer demand. The Employers' Association reported that they were working on a skills gap analysis which they will share with the government so that training centres are aware of what training to offer. They were in favour of introducing the dual apprenticeship mode of training, provided that the necessary conditions prevail, including a legal framework and tax incentives.

Training centres in Zambia, private or public, are at liberty to offer what training they want. Private training centres mostly offer courses in business and commerce, as this does not entail major prior investment. The end result is a high rate of unemployment among young people who have completed their studies. Given the climate of fiscal constraint, more effective use of these resources should have been made. The Government has been contributing around 10 per cent of the budget of these training centres for a number of years while the centres have indulged in supply-driven training which has not contributed to the employment of their students. Had tracer studies been carried out, data on graduate employability would have meant better-informed decisions regarding the allocation of government resources.

While Zambia, like many African countries, has established systems for assessing and certifying learning, some stakeholders pointed out weak links between TVET learning and the labour market outcomes. Unfortunately, there are very little data available to measure the destination rate, which provides a proxy indicator of TVET responsiveness to the labour market. Most of information available in this area comes from small-scale one-off tracer surveys, sometimes with excessively broad definitions of employment. This calls for caution when using the derived data and information. For example, this is the case for Malawi, Mauritius, South Africa, Tanzania and Zambia, which all reported that more than 50 per cent of graduates find employment within six months after graduation (UNESCO and SADC, 2013). This appears to be symptomatic of a wider inadequacy of region-wide attention to the importance of promoting the demand-responsiveness of TVET, which contrasts with the level of

commitment in many countries to invest in TVET with the aim to respond to labour market requirements.

One of TEVETA's key functions is to collect, manage, and disseminate labour market information related to TEVET. The available information includes the number of institutions, distribution according to grades, levels of qualifications offered, provinces and ownerships, and student enrolment in relation to programmes and gender. However, no information is available as to the number of students in public/private institutions, rates of dropouts, or the characteristics of trainees and their employability. Nor is information available as to the types of courses offered by private TEVET providers. Furthermore, no regular tracer studies are carried out to ascertain the progression into employment of graduates. In addition, no assessments are undertaken of the needs of the labour market.

TEVETA management furthermore complained of being short of resources. According to its 2013 annual report, TEVETA's total staff, including directors, managers, specialists, officers, and supporting staff amounted to 45 in December 2013. With significant staff numbers, the limited availability of financial resources is a constraint on TEVETA's operational capacity, including its ability to ensure that TEVET providers meet the needs of industry skills training.

Discussion

According to Mimi Kuo (2015), the purpose of TVET is to equip people not only with vocational skills, but with a broad range of knowledge, skills, and attitudes recognized as indispensable for meaningful participation in work and life. Furthermore, TVET has a widely acknowledged role in furnishing skills required to improve productivity, raise income levels, and improve access to employment opportunities (Bennell, 1999). Maclean (2011) supports the view that TVET improves the skills of those enrolled in TVET programmes thus puts them at an advantage in seeking employment. TVET can also contribute to poverty reduction and help curbing social exclusion, particularly given that the cost of higher education is out of the reach of the majority. Furthermore, it can serve as an antidote to youth unemployment, where the labour market is saturated (ETF, 2005). Maclean also asserts that TVET, if well positioned, could play multi-dimensional roles in stimulating economic growth and social development, improving conventional education, empowerment, wealth creation, poverty reduction, and skills enhancement. TVET is well suited to helping young people and adults become self-dependent and self-reliant, while, for those working in industry, TVET is helpful in enhancing skills and mitigating high job turnover and the risk of obsolescence (Okolocha, 2012).

To achieve the TVET advantages described above, the types of skills provided should be aligned to the demands of the prevailing labour market and/or tailored to stimulate entrepreneurship or self-employment. Some countries have made significant efforts to ensure the TVET responsiveness to the labour market, particularly by promoting an effective involvement of industry in skills provision.

In a recent report, the German Federal Institute of Vocational Education (BIBB) revealed that industry that invests in training gets a significant return on its investment: roughly 80 per cent of the costs of apprenticeship are immediately returned, as the apprentices become more and more productive while trained on the shop-floor. In addition, the industry gets the well-educated and trained workers it needs.

However, in a study comparing Zambia with some SADC and other African countries, Moono and Rankin (2013) found that Zambian firms are the least likely to run formal training programmes for its permanent employees. While this seems in contradiction with the common complaint from employers on the lack of modern relevant skills among post-secondary education graduates, an explanation could be found through the firms' opportunities to use cheaper and more productive labour offered by foreigners. The model of the mining sector, where the Government provided a one-off grant in terms of land, building, and policy support, should be replicated. The Government also sponsors the training of students over and above the needs of the company so that they become competent to work in any related company. Other centres of excellence can be built on that same premise.

This discussion suggests that TEVET cannot effectively perform its role in preparing learners for work if it is designed and delivered in isolation. It will not be able to respond to the demands of the labour market and, as a result, will produce graduates who do not possess the competencies needed by the labour market. Based on their interviews with managers of Zambian firms, Moono and Rankin (2013) reported that, according to employers, 'education providers do not seem to be aware of the relevance of certain skills that industries expect from the graduates'. This suggests that education providers failed to reflect in the current curriculum, the changes that occurred in science and technology.

Therefore, there is a need to build up stronger public-private partnerships (PPP) and to engage individual employers throughout the TEVET system, including in decisions concerning the training to offer, and its design, development, and delivery, and in initiatives such as workplace learning, including internships and apprenticeships. In fact, there has been an unconvincing attempt to engage the private sector in dialogue on TEVET in Zambia, although according to TEVETA, industry is also involved in curriculum development. The TEVETA board comprises members of the private

sector and is chaired by one of these members. But it meets only once every three months.

In the same vein, it is important to strengthen the role of the Zambia National Chamber of Commerce, Industry, and Agriculture and employer associations in the informal sector, and to build up their institutional capacity to participate in TEVET. In Mauritius, for instance, strong PPP is the basis of the success of the Mauritius Institute of Training and Development (MITD). The private sector is present on the MITD board as well as on the school management committees of its various training centres.

The advantages of the PPP are many. Apart from the fact that employers have the opportunity to participate in decisions about the type and content of training offered, they can also help in the following ways:

- Placement of students and trainers in industry. One must be careful not to have trainers competing with students for industrial placement. Having employers on board may resolve this conflicting situation.
- Transfer of management rigour to the training centres.
- Donation of equipment to training centres.
- Participation in job fairs.
- Help in building and enhancing credibility of the training institution.
- Help further developing and reinforcing the PPP.
- Support for graduates' employment.
- Help in marketing short in-service, bespoke training programmes for industry.
- Help in providing part-time competent trainers from industry to boost the quality of training delivery.

Many African countries have adopted 'supply oriented' training systems. Supply orientation means training institutions produce the same types of graduates, year in and year out, without regard for the needs of enterprises and the labour market. As an African Development Bank (ADB) project document states: 'Outcomes … rarely guide the selection of skills and contents with the consequence that offered courses and their contents are regularly irrelevant to needs and demands' (ADB, 2004*b*: 3).

Botswana offers an example of a 'demand responsive' training system, with the Botswana Training Authority given authority to accredit, register, and monitor both public and private training institutions in accordance with the needs of the learners and the industry. Australia too has introduced measures to make its TVET system more employer-driven, with reforms undertaken to ensure greater engagement of industry and employers through the National Qualifications Council. This means

that TVET policy is industry-led. Industry skills councils, representing 10 sectors and composed entirely of industry members, develop standards and qualifications for various occupations. They provide a continuous input process for skills definitions (ADB, 2008a: 94). Sweden also adopts a 'demand-responsive' approach to skills development, with the TVET sector organized to fit with and fulfil the needs of the labour market.

The Singaporean model is of a centralized education system in which the Ministry of Education is mainly concerned with the management of the polytechnics and institutes. However, the Ministry of Manpower supports the Ministry of Education by mapping the specific needs of the labour market in order to match the content of the curriculum with the needs of the society.

In Germany, industry itself has the main responsibility for vocational training. It designs the standards and curricula according to its changing needs, constantly developing and redeveloping national occupation standard. Industry conducts most training and education on the shop floors of its companies, with additional instruction delivered by state-run vocational schools. The industry even pays an adequate salary to its apprentices. The chambers of commerce monitor the whole system, also offering exams and issuing certificates, which are recognized all over Germany. Trade unions, too, play a very supportive role in the system. The whole process is framed and enforced by the Vocational Education and Training Act.

As discussed with local stakeholders involved in this review, Zambia can learn from the experiences described above in order to enhance its TEVET responsiveness to labour market.

RECOMMENDATIONS

- TEVETA should develop a closer and mutually beneficial collaboration between TEVET providers and industry, with effective participation of industry representatives in all stages of TEVET planning, including in curriculum design, delivery, and assessment. This will help in providing TEVET providers with regular updates on relevant and modern skills, while the employers will have more confidence on the TEVET outcomes.
- Government should provide incentives to further encourage workplace experience learning for TEVET students in order to ensure an effective transfer of relevant skills. This can provide a recruitment pool from which industry could recruit and allows firms to establish relationships with learners, facilitating their future recruitment.

- TEVETA should set up effective mechanisms to ensure that TEVET is aligned with the needs of employers and learners by carrying out employment trends survey, training needs analysis, and tracer studies. To this end, TEVETA needs to be supported by all relevant stakeholders, including Government, employers, development partners, and communities. NGOs can be capacitated to carry out training needs analysis (TNA) for the informal sector. This implies that relevant institutional arrangements and provisions are in place to respond to those needs.
- TEVETA should enhance the quality and the sustainability of the TEVET management information system (TEVET-MIS), and develop/reinforce its linkages with Zambia Statistics Office and the labour market data systems. This implies adequate funding, skilled staff and enabling working conditions, in terms of technological equipment and facilities, staff salaries and development.

Policy issue 5: Curriculum development not relevant to labour market requirements

Due to irregular revision and update of the curriculum, many TEVET courses are delivered with outdated curricula which prove to be less relevant to the labour market requirements.

Evidence

TEVETA provides guidelines for the development of institutional curricula and approves curricula and standards of certificates in institutions established or registered under the TEVET Act.

Curricula are supposed to be reviewed every three to five years, depending on the duration of the course. For example, for diploma courses curriculum review is meant to take place every five years. However, reviews have not been done for quite a long time due to lack of resources (inadequate funding, late release of funds, low staffing levels in curriculum development unit). As a result, some courses which date back many years, and are now obsolete, are still being offered.

As the TEVETA website notes, 'for some time now, there has been an outcry from industry that curriculum was not meeting the requirements of industry, and TEVETA, through its Curriculum Development Unit, has attempted to overcome this challenge by adopting a curriculum development and review system that is said to be more effective and efficient in producing curricula that are industry focused'.

Curriculum development, as defined by TEVETA, is a lengthy process. The need for the development of a new programme or the review of an existing one can be identified by any stakeholder, that is, by industry, trade or professional associations, training providers, the community, or TEVETA. Occupational profiles are developed before being used to develop curricula indicating the learning outcomes expected of trainees at the end of each learning programme (Konayuma, 2007: 4).

Once a need is identified, TEVETA starts planning. A curriculum development review team (CDRT) is convened to develop or review the curriculum. The CDRT is made up of people from industry, trade or professional associations, training providers, and other experts in the field who may not belong to any of the above categories.

According to TEVETA 2013 annual report, 19 curricula out of a planned annual target of 24 were developed or reviewed during 2013. An additional 17 curricula were at job profile development stage. Of the 40 curriculum documents that went through the full curriculum development cycle during the year, 24 were approved by the Occupational Standards, Curriculum and Training Systems Sub-Committee of the TEVETA board, leaving a backlog of 17 programmes at approval stage and 46 at other stages of development by the close of the year. The result is that many courses are being offered with an outdated curriculum. It is therefore not surprising that students graduating from these courses are not employable in the labour market.

Also, while entrepreneurship development emerged as an important component in all types of technical and vocational training in both formal and informal sectors (MSTVT 2010), its integration into TEVET curricula is not yet effective, as is also the case for trainers' training programmes. This is well reflected through the following comments, made by a stakeholder: 'Entrepreneurship education should progressively be integrated into curricula and the use of entrepreneurial pedagogies should be advocated across sections, departments and, finally, faculties in universities, unlike the current scenario where entrepreneurship is regarded as a pre-occupation for those who have failed to make it academically'.

Discussions with stakeholders, as part of this review, suggest that efforts have been made to integrate entrepreneurship training but the approach taken has not been effective. Little has been done to ascertain what the great majority of people who are not in formal employment are doing to earn a living, mostly working in micro, small

and medium-sized enterprises[12] (MSMEs). It was pointed out that TEVETA has been developing a draft policy on entrepreneurship for the last three years. Unfortunately, it was not possible to view a copy of the draft. Nevertheless, it is emphasized that entrepreneurship should not be taught as an independent module. It should, rather, be integrated, with trainers trained to relate their teaching to entrepreneurship.

The various curricula of the 2013 education curriculum framework make no mention of entrepreneurship amongst the different subjects on offer at the various levels in secondary school education. It is interesting, though, to note that the framework indicated that entrepreneurship education 'shall be integrated in the curriculum for teacher education'. Hopefully, the teachers concerned will integrate entrepreneurship into their teaching.

As far as curriculum is concerned, another element which is becoming increasingly critical is sustainable development. Growing concerns about climate change, environmental degradation, and scarcity of resources are driving TEVET to develop skills and provide knowledge to pave the way towards a green economy and society. While the Government of Zambia has enacted a new Environmental Management Act (EMA) No. 12 in 2011, ILO (2013) warned that much of the current economic performance has come at a huge environmental cost for future Zambian generations. Therefore, 'Zambia has yet to embrace and exploit the potential scale of job creation related to the emerging green economy', ILO recommended. Also, a survey by UNCDF (2014) mentioned, among the barriers to youth employment (as assessed by employers), the limited access to training in life skills and business support.

Discussion

To be relevant and responsive to a rapidly changing labour market, the TEVET curriculum should be up-to-date and keep a proper balance between generic learning and social skills, and specific vocational skills (UNESCO, 2012). Hence, an increasingly important task for TVET is to prepare students to learn how to update knowledge and how to adapt to new situations, rather than simply preparing for specific occupations.

With regard to the integration of entrepreneurship into TVET curriculum, the Mauritian experience can be useful for Zambia. At the Mauritius Institute of Training and Development (MITD), TEVET trainers have been trained to integrate some

12 The Zambian Ministry of Commerce, Trade and Industry (2008) reported the existence of a large MSMEs sector, of which over 90 per cent are informal. This subsector is dominated by enterprises with a workforce of less than 10 employees and more than half of all MSME business activities are based in rural areas. The primary objective of most of the MSME owners is to generate employment and income for personal requirements.

elements of entrepreneurship in their technical teaching. Technical trainers are now able to offer their students examples of how materials are sourced, costed, and utilized, and the labour involved production. This helps students to better understand the basic concepts involved in costing of a product or service, which is an essential knowledge for a self-employer or an entrepreneur.

UNESCO experts meeting in Bonn in October 2004 highlighted the need to re-orient TVET curricula to better acquaint students and trainees with conservation and the sustainable use of resources, social equity, and appropriate development, as well as with competencies to practice sustainable tasks in the workplace. Thus, training materials should be developed on education for sustainable development (ESD). Obviously, there should also be a training programme for trainers on how to implement ESD.

In the same vein, the head of UNESCO-UNEVOC, states that 'improving young people's chances for meaningful employment and making jobs more environmentally sustainable are actually not separate issues – young people are our future and green skills can contribute to safeguarding this future for the next generations.' So the TEVET curriculum must include strong elements of sustainable development and entrepreneurship education, in addition to technical content and other skills for employment.

RECOMMENDATIONS

- Government should ensure that TEVETA policy of regular curriculum review be effectively implemented. This will contribute to addressing emerging problems of graduates entering the labour market without these skills. In this context, more resources should be placed at the disposal of TEVETA.
- TEVETA should ensure that design and delivery of curriculum are informed by industry's needs and trends. Industry, TEVET providers, and TEVETA should collaborate throughout the different processes of curriculum design, implementation and review.
- TEVETA should ensure that entrepreneurship is effectively integrated in TEVET curricula and that trainers are trained in use of entrepreneurial pedagogies.
- TEVETA should ensure that TEVET curricula are also informed by international trends, in addition to employers' requirements in order to integrate updated and modern training skills on sustainable development, on business support, and social and life skills.

Policy issue 6: Lack of quality trainers

A number of serving TEVET practitioners (trainers, assessors, and examiners) do not meet one or more TEVETA standards for accreditation, namely academic qualifications, pedagogical skills, and industrial experience.

Evidence

The Technical and Vocational Teachers' College is the only institution in Zambia specializing in pedagogical training for TEVET teachers. It provides full-time, part-time, short-term, and distance courses with full-time programmes offered in the following areas: (i) technical teacher's diploma; (ii) commercial secondary teacher's diploma; (iii) advanced teacher's diploma (commercial and design and technology); (iv) design and technology teacher's diploma; (v) guidance, counselling, and placement diploma; and (vi) special vocational teacher's diploma.

Initial teacher education consists of pedagogical training for those with a technical qualification, while pedagogical skills can be upgraded through CPD extension studies. Technical training for teachers is provided at technical training institutions and universities. The highest qualification delivered by the Technical and Vocational Teachers' College is the diploma in TEVET, with an average annual output of 100 teachers.

According to UNESCO and SADC (2013), there were 205 full-time students in TEVET teacher training (60 per cent male), 835 in distance programmes (58 per cent female), and 15 in extension programmes (73 per cent male). There are three types of TEVET practitioners – trainers, assessors, and examiners – each with their own specific responsibilities. Industry employees may be assessors and examiners, though not in a training institution (UNESCO and SADC, 2013).

Table 34 Number and type of TEVET teaching staff

Type	Number
Trainers	1,063
Assessors	466
Examiners	283
Total TEVET staff	**1,812**

Accreditation is required for trainers, but it is believed that some trainers lack accreditation and there are no data on actual qualifications.

Source: UNESCO and SADC, 2013.

TEVETA is in charge of accrediting TEVET trainers, assessors, moderators, and examiners. The accreditation system is based on a set of minimum technical and teaching qualifications outlined by TEVETA. TEVET instructors qualify in teaching at different TEVET levels, as specified in the TEVET qualifications framework.

For registration with TEVETA, trainers must possess the required qualifications, pedagogical skills, and industrial experience. Two issues have been noticed, however. First, an individual with no pedagogical skills can receive provisional registration and be given time to update his or her pedagogical skills. Trainers are also sometimes registered without the necessary industrial experience. Concerns have been raised about the quality of instructors, as many of them possess specific technical qualifications and work experience, but lack the required skills for effective teaching (Commonwealth, 2016).

The other problem concerns the huge turnover of trainers, mostly due to low remuneration. A survey undertaken by the NEAC on capacity assessment of public TEVET institutions revealed that TEVET trainers, despite their technical importance, are paid lower salaries than their counterparts in the teaching service. This imbalance affects their motivation and accounts for their preference for migration to the teaching service, leaving the TEVET sector understaffed and with high staff turnover (GRZ, 2014).

Previously, when TEVET trainers were on the government pay roll, they could be transferred from one training institution to another, according to need, and were being paid by the Government. However, TEVET providers have since been given their own management autonomy and can recruit, dismiss, and decide on pay. Hence, many training institutions, particularly those in rural areas, have found it extremely difficult to recruit and retain competent trainers. Some providers find themselves trapped in a vicious circle, unable to recruit the staff they need to engage more students, while low student numbers restrict recruitment efforts and prevent them offering appropriate remuneration.

The result is that many training institutions cannot afford either to pay trainers a decent, attractive salary or to invest further in their facilities and human resources. This is a source of high staff turnover; the best trainers leave TEVET for more attractive salaries elsewhere. Consequently, some institutions have no choice but to recruit poorly qualified trainers who in some cases find themselves offering training in courses above their own level of qualification. Facilities, furthermore, are generally poor, which also leads to low-quality training incapable of attracting sufficient numbers of learners.

Discussion

A UNESCO study on the status of TVET in the SADC region found that 'few countries have systems in place for data management on TVET trainers/instructors, or for initial teacher education or continuing professional development in contextualised TVET staff qualifications'. It also highlighted that TVET instructors tend to occupy a lowly place on the occupation hierarchy, especially when compared to teachers in academic schools and lecturers in higher education (UNESCO & SADC, 2013). Overall, the investment in TVET trainers does not seem to be a priority for most countries in the region, including Zambia. This is somewhat in contradiction with most of these countries' policy frameworks, which recognize the importance of TVET for youth employment and fulfilment as well as for their nations' socio-economic development.

UNESCO report (2015) of recommendations on technical and vocational education and training dedicate a whole section (Section 35) to TEVET trainers. It notes the importance of developing policies and frameworks to ensure a supply of qualified and high-quality TVET staff, including teachers, instructors, trainers, tutors, managers, administrators, extension agents, guidance staff and others. Also, referring to the growing consideration of work-based learning and TVET in other settings including community-based, distance and online, the Report invites Member States to more systematically support and acknowledge the emerging roles and learning needs of trainers, tutors and other facilitators, by considering the development or strengthening of policies and frameworks concerning their status, recruitment and professional development. It advocates that TVET staff should have decent working conditions and adequate remuneration, as well as career and professional development opportunities.

To this end, the Report recommends the application, in the TEVET subsector, of the recommendation concerning the Status of Higher-Education Teaching Personnel (1997) and that of the recommendation concerning the Status of Teachers (1966), especially with regard to the provisions on preparation for the profession; further education for teachers; employment and career; the rights and responsibilities of teachers; conditions for effective teaching and learning; teachers' salaries and social security. In this connection, it is noteworthy that, currently, no TEVET trainers are members of the Zambia National Union of Teachers, which would help raise their status at the same level as their counterparts in the teaching service.

UNESCO (2015) also warned that trainers should be equipped to cope with changing social and economic requirements. The role and responsibilities of trainers are changing and they should be prepared and equipped to work with different types of learners, including those from vulnerable groups (girls, people with disabilities, etc.).

Hence, they should be provided with special training skills. They must also master entrepreneurship and sustainable development skills in addition to their technical subjects. It is therefore important to secure sufficient budget for continuous professional development for TVET trainers.

In the same vein, TVET trainers in educational institutions and the workplace should have the capacities required to make TVET responsive to the economic, social, cultural, and environmental contexts of the communities and societies in which they work and to contribute to the transformation and expansion of TVET. In particular, TVET staff require initial preparation, as well as continuing training and professional development, including experience of working in enterprises, and support to enable them to reflect on their practice and to adapt to change. The initial and continuing professional development of TVET staff should include training on guidance and gender equality (UNESCO, 2015).

TEVETA has a role here in developing proper standards for the accreditation of trainers, assessors, moderators and examiners. The example of Botswana, which has developed such standards, can be inspiring.

A number of TEVET stakeholders consulted during the review seem to support that trainers employed by public training centres be restored to the government payroll. They are also in favour of introducing a system of performance management within which each trainer would have to deliver against agreed targets.

RECOMMENDATIONS

- Government, through the Ministry of Higher Education, should strengthen the systems of initial training, and review the Initial Training of Trainers Programme to better prepare and equip trainers to handle new emerging situations.
- Government should strengthen the systems for continuous professional development, management, and support of TEVET trainers.
- Government should restore public trainers to its payroll and pay them a decent salary in order to raise their status and morale, and recruit and retain the best trainers.
- TEVETA should review and enhance the standards of accreditation for trainers, assessors, moderators, and examiners.

Policy Issue 7: Low quality of training

The quality of TEVET, as assessed through system's internal efficiency (pass, throughout, and destination rates) and feedback from employers, is a matter of concern.

Evidence

TEVETA ranks registered training institutions on the basis of their ability to satisfy minimum training standards. It inspects TEVET institutions and awards grades, as described below:

- *Grade 1 – Very good: The institution is very good in terms of management, staff, and facilities and shows very few weaknesses.*
- *Grade 2 – Good: The institution offers good basic quality training but shows some problems in management, trainer qualifications, or facilities. It shows more strengths than weaknesses but there are areas in need of improvement.*
- *Grade 3 – Satisfactory: The institution shows a mixture of strengths and weaknesses in the above-mentioned quality elements. It barely meets the minimum training standards.*

While this list of grades is supposed to be available in TEVETA, the issue is whether it is up-to-date and made public to ensure that all stakeholders are aware thereof. TEVETA also oversees assessment and certification. While continuous assessment is carried out by training providers, evidence is accumulated for external verification. The terminal testing of trainees' competency is conducted by external assessors and examiners, either on site or at a trade testing centre. TEVETA's role in quality assurance is critical; it is responsible for training, accrediting, and monitoring verifiers, assessors, examiners and trade testing centres in order to ensure that their marking is in line with national standards. Certificates are awarded to successful trainees only once the marking sheets of external assessors/examiners have been validated by TEVETA. The grading system for awards ranges from Level III (pass) to Level I (distinction).

However, in its 2014 Report to National Assembly (on September 25, 2014), the Committee on Education Science and Technology stated that '*TEVETA inspections were not conducted regularly to determine whether minimum training standards in the TEVET institutions were maintained. The irregularity of inspections was due to capacity and financial challenges by the regulatory Authority. However, these visits were of little value as the visitations were often routine and mostly no feedback was given*'.

Zambia's intention to ensure training for high-quality skills has been repeatedly expressed since the 1996 TEVET policy. Successive strategic documents and statements intended also to improve the quality of TVET, strengthen links to the labour market, in terms of both requirements and opportunities, and broaden the scope of the policy to include all types of TVET in both formal and informal economic sectors. However, Zambia is still struggling to put its intentions into practice, since a number of challenges identified continue to persist, including: the poor state of repair of TVET institutions and inadequate and outdated equipment and resources; logistical and financial constraints that prevented the government from performing its governance role in the sector; outdated curricula; and ineffective follow-up, evaluation, and inspection services. Consequently, the quality of TVET is so low that many graduates of the system are not sufficiently skilled to meet the skills needs at entry levels in the formal sector.

A report of Committee on Education Science and Technology (2014) pointed out 'inappropriate and ineffective technological infrastructure which did not meet the required standards to both training needs and final demand'. It stated also that 'infrastructure in terms of standing buildings, lecture rooms and offices in all TEVET institutions is generally adequate. Some institutions have equipment for which demand hardly exist, while others had little or no equipment where demand exists. Most equipment being either obsolete or running down, training is done using outdated technology which is sometimes totally different from what the trainees would be expected to work with once they get into industry. The quality of equipment is so inadequate that the average ratio per lecture time is up to thirty-six (36) students to one (1) machine. This indubitably raises serious concerns about the quality of learning that could be delivered'.

During the review mission it was also noted that the quality of facilities is very poor in most training institutions. For example, in the Industrial Skills Training Centre, Lusaka, the equipment dates back to 1986 when Germany provided Zambia with state-of-the-art equipment in major sectors such as manufacturing and the automotive industry. Much of this equipment is no longer in good working condition. The workshops are in a state of despair. No major investment has been effected but for a few pieces of equipment donated by Trans Aid. The Mazabuko skills training centre occupies very old facilities, dating back to 1935. Here again, there is a lack of equipment, and learning and teaching materials are expensive.

The other element which impacts directly on the quality of training is the quality of trainers, as elaborated above. System exists at TEVETA to register and accredit trainers. However, as many of these training institutions cannot afford to pay a decent salary to trainers, they cannot attract quality trainers to work with them.

As a consequence of the facts described above, most stakeholders noted, during the review mission, that there has not been significant improvement as far as TEVET quality is concerned. This have certainly have been exacerbated by other issues, such as: curricula are not being reviewed at regular intervals; insufficient budget is allocated to TEVET; no strategies have been introduced to establish internal and external evaluation systems based on tracer mechanisms and criteria; no strengthening of the capacity of the system has taken place to implement such systems; the National Qualifications Framework is not fully operational; TVET data remain scant; and financial resources are lacking and teaching is mainly academic.

Discussion

A sound assessment of TVET quality and efficiency should be based on the evidence of pass, throughput and destination rates, related to the unit costs of delivering these outcomes. According to UNESCO and SADC (2013), it is difficult to measure the actual quality and efficiency of TVET in the SADC countries, due to weak quality of data, both for unit costs and for trainees' flows. For example, only five of the SADC countries reported on throughput data, and only three reported that more than half of a learners' cohort exits successfully (Mauritius, Seychelles and Zambia – though, the latter from a different dataset from the pass rate data) (UNESCO and SADC, 2013).

With this in the background, other factors to be considered include the ratio of students to trainers and how the training compares with that on offer in other countries. SADC came up with a series of criteria and indicators, which it used for the assessment and review of TVET in the region, leading to the development of a regional strategy for the revitalization of TVET in 2013. This UNESCO-SADC report (2013) suggests that, while TVET quality indicator can be derived as a proxy measure of training inputs, processes, outputs and outcomes, most countries have no data readily available to calculate these proxy indicators. Hence, in the SADC countries, including Zambia, data on the key quality measures are limited in both coverage and robustness.

While available data are often incomplete and uneven (UNESCO and SADC, 2013), the sample of indicators on the quality of TVET, presented in the above cited report, suggests that the efficiency of TVET system is low in most SADC countries (*Table 35*).

Table 35 TVET quality/efficiency indicators

Country	Pass rates			Throughput rates			Destination rates into employment: learner employment rates after graduation			
	Public	Private	Year	Public	Private	Year	6 months after	2 years after	Related to prog. study	Year
Angola										
Botswana							23.1%	40.6%		2010
D.R.-Congo										
Lesotho	50.0%	70.2%	2009							
Madagascar										
Malawi	*35.0%		2010				86.0%	42.4%	72.6%	2009
	**52.5%		2007							
Mauritius	90.4%		2010	71.0%		2010	67.7%			2008
Mozambique	60.5%		2009							
Namibia	55.0%		2008					48.9%		2008
Seychelles	78.0%		2009	71.0%		2009				
South Africa				✦4.0%		2007	52.9%		60.0%	2007
Swaziland	59.0%		2010							
Tanzania	#82.0%	80.0%	2010	23.0%	53.0%	2010	69.9%	2.2%	79.5%	2010
	##92.0%		2010							
Zambia	51.0%		2010	54.0%		2010	55.0%	34.8%	44.5%	2008
Zanzibar	92.9%		2010							
Zimbabwe										

Source: UNESCO and SADC, 2013.

Notes:

** Data refer to trade test.
** Data refer to advanced craft.
# Data refer to public VET.
Data refer to public TET.
✦ Throughput data in South Africa – taken from the first cohort of learners entering the National Certificate (Vocational) programmes in 2007 at public FET colleges and passing all seven subjects at NQF Level 4 in 2009 - show throughput of 4%.

Table 35 shows that only three countries (Mauritius, Seychelles and Tanzania) exhibited pass rates greater than 75 per cent, and pass rates vary worryingly within several countries across institutions, programmes and gender. The lack of comprehensive throughput data in the region is a serious concern, as this is essential for measuring the efficiency of TVET systems. As for the destination rates into employment, the Report pointed out that there is very little information on learners after six months of employment and minimal information on TVET learner employment in their field of study. It is assumed also that qualification levels of trainers/instructors, overall, are low, and may be particularly poor in segments of private TVET provision (UNESCO and SADC, 2013). What is apparent for almost all SADC countries is that their longstanding commitment to relevant training still has not yet translated into effective TVET systems capable to establish the relevance of public TVET provision for the labour market.

With regard to external efficiency, there is no better way of assessing the quality of TEVET delivery than through the feedback of its end users (industry and employers). Then, the quality of the training is the end result of a system incorporating a series of sub-systems, namely: the effectiveness and responsiveness of the training offered to the labour market, the quality of the training facilities available, the quality of the trainers involved, and the degree of industry involvement in the delivery and assessment of training.

Hence, ensuring quality requires capacity for regular assessment and monitoring of the TEVET programme implementation as well as results in terms of students' flows and feedback from employers. However, a report by UNESCO and SADC (2012) pointed out the limited capacity for TVET policy implementation in many SADC countries. In the case of Zambia, the Report stated, this is attributed, amongst other factors, to a dearth of managerial skills and capacity in the relevant departments and institutions.

According to UNESCO and SADC Report (2013), the training quality assurance system in the SADC region still needs to be strengthened in terms of monitoring and evaluation, with a view to promoting quality improvement. The Report notes the continuing efforts to involve professional bodies, trade associations, and subject experts in the quality assurance system, although current results show that this is being done only in a few sectors.

RECOMMENDATIONS

- Government should reinforce TEVETA to prioritise and direct financial resources for the revitalization of the TEVET institutions through adequate investments in the state of the art technical equipment, modern workshop, computer labs and ICT infrastructure, in all the TEVETA colleges.
- Government should support TEVETA in enhancing its quality control mechanisms to ensure that all public and private institutions meet quality standards. To this end, TEVETA should revise and reinforce the standards for approving and accrediting training institutions, trainers, moderators, examiners, and assessors.
- TEVETA should strengthen the TEVET Management Information System (TEVET-MIS) to ensure that data on system efficiency and quality are collected, analyzed and used for TEVET policy and planning. Quality data will help to make strategic decisions based on evidence, usage, and analysis of information related to system efficiency in producing graduates as well as graduates' employment outcomes. This is critical if one has to maximize the efficient use of the limited public funding to TEVET system.
- TEVETA should ensure that the grading of training centres is regularly updated and made available to all relevant stakeholders and the large public.
- Government should support TEVETA to carry out regular and comprehensive tracer studies and publish the findings.

References

African Union. 2006. *Plan of Action for the Second Decade of Education (2006–2015).*

Bishop, J. H.; Mane, F. 2005. 'Economic returns to vocational courses in US high schools'. In: *Vocationalized secondary education revisited* (pp. 329–362). Netherlands: Springer.

Commonwealth of Learning (Ed. Du Vivier). 2016. Situational Analysis and Baseline Study Open of Distance and Flexible Learning in the TEVET sector. Retrieved from: http://dspace.col.org/bitstream/handle/11599/1776/2016_DuVivier_Situational-Analysis-Baseline-Study-ODFL-TEVET_Zambia.pdf?sequence=1&isAllowed=y.

Dubois, R.; Balgobin, K. 2008. Financing of TVET: Examples of some countries. National TVET Policy Development Workshop, Swaziland 19–21 November 2008.

Dubois, R.; Balgobin, K. 2009. *Best practice in financing of training through continuous improvement of the levy/grant system*. UNESCO/UNEVOC.

Dubois, R.; Juwaheer, Y. 2012. *Skills for green jobs in Mauritius*. ILO/UNESCO.

Durango, L. 2002. The financing of technical and vocational education and training (TVET): Options and challenges for sub-Saharan Africa.

Government of Zambia. 2014. Committee on Education, Science and Technology. Report of the Fourth Session of the Eleven National Assembly, appointed on Thursday 25th September 2014. Retrieved from: http://www.parliament.gov.zm/sites/default/files/documents/committee_reports/Report%20for%20the%20Fourth%20Session%20Education%202015.pdf.

IIEP (UNESCO International Institute for Educational Planning). 2003. *Synthesis of main findings from two case studies carried out in Ghana and Zambia on private technical and vocational education and training (TVET).*

International Labour Organization. 2013. Zambia Green Jobs Programme. Republic of Zambia, Ministry of Foreign Affairs. UN Zambia. Retrieved from: http://www.ilo.org/wcmsp5/groups/public/@africa/@ro-addis_ababa/documents/genericdocument/wcms_213390.pdf.

Kharge, M. 2015. *Forging India-Germany partnerships in skill development*. Retrieved from: http://download.diplo.de/New_Delhi/Final%20Report%20-%20India%20Germany%20Partnership%20on%20Skills.pdf.

Konayuma, G. 2008. 'Country report of TEVET in Zambia'. Paper presented at UNEVOC international experts consultation seminar in Dublin.

Kuo, M. 2015. *Technical vocational education and training*. Retrieved from: http://www.unesco.org/new/en/newdelhi/areas-of-action/education/technical-vocational-education-and-training-tvet/.

Laglo, J.; Maclean R. (Eds). 2005. *Vocationalized secondary education Revisited*. Netherlands: Springer.

Malaysia 11th National Development Plan 2016–2020. Retrieved from: http://rmk11.epu.gov.my/book/eng/Elevent-Malaysia-Plan/RMKe-11%20Book.pdf.

Mauritius Institute of Training and Development. Corporate information. Retrieved from: http://www.mitd.mu/about_us.php.

Mauritius Qualifications Authority. 2012. Quality assurance standards for training institutions. Retrieved from: http://www.gov.mu.

McGrath, S. 2004. *Transforming vocational education and training in Southern Africa: New issues and challenges*. British Council.

MESVTEE. 2010. *Education Sector National Implementation Framework III 2011–2015*. Lusaka, Zambia.

Ministry of Finance, Zambia. 2014. *Revised Sixth National Development Plan (2013–2016).*

Ministry of Education, Ethiopia. 2008. *National Technical and Vocational Education and Training Strategy*, 2nd Edition.

MSTVT. 1996. Technical education, vocational and entrepreneurship training policy.

Nkanza, P. K. 2010. National report on literature review of TEVET in Zambia.

Republic of Zambia. Ministry of Commerce, Trade and Industry. 2008. The Micro, Small and Medium Enterprise Development Policy. Final Report. Retrieved from: file:///C:/Users/h_mputu/Downloads/MSE%20Development%20Policy.pdf.

TEVETA (Technical Education, Vocational and Entrepreneurship Training Authority). 2013. *Annual report 2013.*

TEVETA. 2014. Strategic plan, 2014-2016.

TEVETA. 2013. Possible models for implementing vocational training in secondary schools.

UNDP (United Nations Development Programme). 2013. *Human Development Report of Zambia.*

UNESCO and SADC. 2013. Status of TVET in the SADC Region. Assessment and Review of TVET in the SADC Region and of the Development of a Regional Strategy for the Revitalisation of TVET. Retrieved from: http://unesdoc.unesco.org/images/0022/002256/225632e.pdf.

UNESCO-UNEVOC. 2004. UNESCO international experts meeting in Bonn.

UNESCO-UNEVOC. 2010. World TEVET Database: Zambia.

UNESCO-UNEVOC. 2012. *Malaysian education policy review*.

UNESCO-UNEVOC. 2013. *Expanding TVET at the secondary school level*. Asia Pacific Education System Review Series.

UNESCO-UNEVOC. 2013. *Policy review of TVET in Cambodia*.

UNESCO-UNEVOC. 2013. *TVET policy review for Zanzibar*.

UNESCO-UNEVOC. 2014. *TVET policy review: Saint Kitts and Nevis.*

UNESCO-UNEVOC. 2015. *Final report containing a draft text of the recommendation concerning technical and vocational education and training.* Retrieved from: http://unesdoc.unesco.org/images/0023/002325/232598e.pdf.

UNESCO-UNEVOC. 2015. *Unleashing the potential: Transforming TVET*.

UNESCO-UNEVOC. 2015. *Zambia at a glance: A benchmarking comparison.*

UNESCO-UNEVOC. 2012. Third International Congress on Technical and Vocational Education and Training. Shanghai, People's Republic of China, 14–16 May 2012.

UNESCO. 2014. *EFA for teachers: Technical and vocational teachers and trainers. A review of policies and practices on continuous professional development*. Retrieved from: http://creativecommons.org/licenses/by-sa/3.0/igo/.

United Nations Capital Development Fund (UNCDF). 2015. Zambia country report. Youth start global inception phase. Youth economic opportunity ecosystem analysis. Retrieved from: http://www.uncdf.org/sites/default/files/Documents/youthstart_global_-_youth_economic_opportunities_report_zambia.pdf.

Wikipedia. 2015. Education in Singapore. Retrieved from: https://en.wikipedia.org/wiki/Education_in_Singapore#Secondary_education.

World Bank. 2015. Education Public Expenditure Review in Zambia. Education Global Practice.

World Bank. 2016. Doing Business 2016. Measuring regulatory quality and efficiency. Economy profile 2016. Zambia. Retrieved from: http://www.doingbusiness.org/data/exploreeconomies/zambia/~/media/giawb/doing%20business/documents/profiles/country/ZMB.pdf.

3.4 Youth and Adult literacy and education (YALE)

Introduction: Context and policy environment of YALE in Zambia

Adult literacy education in Zambia is as old as the country's independence. It was, indeed, first introduced in 1966, under the Ministry of Community Development and Social Services (MCDSS). The mandate to provide adult literacy remained under MCDSS until 2004, when the Government, through a gazette notice, designated the Ministry of General Education (MoGE), to be in charge of this portfolio. Thus, before 2004, the Ministry of Education had not been directly involved in providing adult literacy education in Zambia. Its involvement was at the post-adult literacy level.

From 1965 up to the 1980s, people were encouraged to enrol in evening classes conducted by Ministry of Education under the then Department of Continuing Education, now the Directorate of Distance Education (DODE). However, since 2004, MoGE, through DODE, has been providing, managing, coordinating and monitoring YALE activities; and in 2007, the Permanent Secretary Ministry of Education appointed an adult literacy technical committee. In addition to MoGE, other line Ministries as well as twenty-five different organisations, namely, Civil Societies and Faith Based Organisations, conduct adult literacy programmes in the country.

Concurrently, several acts and policies were ratified in order to guarantee education and literacy for all. Zambia's constitution of 1964 which made provision for equal and adequate educational opportunities in all fields and at all levels in the form of directive principles, was the first in a long series of national and international conventions. Within this framework, various government policy documents aimed at regulating and guiding YALE provision in Zambia. From 2003 to 2007, the Ministry of Education Strategic Plan (MoESP) covered post-primary, ECCDE and also adult literacy areas. Following this, the National Implementation Framework (NIF), 2007 – 2010, developed four priorities areas, including literacy education. This was reinforced with the Fifth National Development Plan (FNDP) from 2006 to 2010.

The immediate focus of the sub-sector during the FNDP was policy development, clarifying the roles of the public sector and civil society in literacy education delivery. In the light of this, FNDP has put a strong emphasis on this field, planning, amongst others, to provide specialized literacy programmes to the blind and deaf adults as well as gender education to literacy learners and instructors, review literacy curricula, develop specific literacy programmes for youth and particularly female youth and ensure equitable access to literacy education (women and rural communities).[13]

The current National Development Plan, the Sixth National Development Plan (SNDP), also made some provisions to increase Adult literacy levels, through: (i) establishing and increasing participation in adult literacy centres; (ii) enhancing access and quality assurance; (iii) linking adult literacy programmes to higher education and skills development programmes, and (iv) building capacity of adult literacy providers at all levels.[14] In the same vein, NIF III (2011-2015) dedicated one of its goals to adult literacy with the following strategic objectives: (i) to increase access to adult literacy education; (ii) to improve the quality of literacy education, and (iii) to promote equity in the delivery of adult literacy programmes[15].

A stand-alone policy on adult literacy was first mooted in 2004 when the Ministry of Education was allocated responsibility for literacy. Also, some other plans and policies, not directly under the Ministry of Education, included YALE in their programmes. The 2003 policy of the Ministry of Community Development, Mother and Child Health did include basic provisions for literacy work.[16] Similarly, the National Youth Policy of 2015 set several objectives, one of which deals with education and skills development and recommends to advocate for the incorporation of literacy, numeracy, life and communication skills in the curriculum for those who cannot return to mainstream education.[17]

The civil society organization, People's Action Forum (PAF), has been contributing constructively to the formulation of such a policy since 2008, when it published 'An assessment of the extent of adult literacy in Zambia' based on an extensive survey of literacy organizations and literacy workers in the country. In 2009, PAF followed this up with a stakeholder position paper setting out a number of strategies entitled '*Adult literacy: the way forward in Zambia*'. Following the Sixth International Conference on Adult Education (CONFINTEA VI) in Belem in 2012, which boosted national efforts to reinforce policies and laws concerning YALE, PAF undertook a further

13 National Report of Zambia by MoE, 2008.
14 SNDP p. 94.
15 NIF III p. 34.
16 The National Policy for the Department of Community and Development.
17 National Youth Policy p. 9.

study, '*Provision of youth and adult learning and education in Zambia after Belem*', followed in 2014 by a large workshop, the report of which is entitled '*Strategy for accelerating YALE programmes in Zambia after Belem*'.

Alongside these initiatives, several attempts were made to establish a policy that would be entirely dedicated to youth and adult literacy and education. In the past decade, a standalone policy on youth and adult literacy was initiated but it finally was not materialised. In 2009, DODE did set about drafting a National Policy on Youth and Adult Literacy, with the process reaching its culmination in 2015. This Policy was developed through provincial consultative meetings and with inputs from various stakeholders at different levels. Recently, however, the Ministry was advised by Cabinet Office that it would prefer to see such a policy as a part of a revised education policy, rather than a standalone policy. Thus, despite literacy being included in several national plans and policies, the country has no policy on adult literacy until now. YALE is still guided by the heterogeneous framework described above.

YALE institutions and provision in Zambia

Zambia has a number of education programmes that serve youth and adult populations. Unfortunately, these programmes are too small in scale, suffer from serious shortages of funding, and are apparently in need of rejuvenation. Currently 0.01 per cent of the education budget is allocated to youth and adult literacy.[18]

Currently YALE is offered through structured and non-structured systems, at literacy centres, countrywide. In 2015, DODE reported that the total number of adults and young people enrolled in 1,057 literacy centres was 27,132. Only one-third of provision was provided by MoGE, as shown in *Table 36*.[19] The other providers include The Ministry of Community Development, Mother and Child Health, the Ministry of Health, the Ministry of Agriculture and Livestock, the Ministry of Home Affairs (Prisons Service), faith-based organizations, and non-governmental organizations. Of particular note is the People's Action Forum that has implemented a REFLECT approach in three provinces and played an advocacy role for increased attention to youth and adult literacy in the country.

18 Talking notes for the Permanent Secretary.

19 Talking notes for the Permanent Secretary. No gender breakdown is provided. However, historical data provided by the MCDMCH suggests that about 70 per cent of literacy learners are women.

Table 36 Enrolment in literacy centres in Zambia in 2014

Provider	Number of Centres	Number of Learners	Number of Learners per centre
MoGE	315	9,091	29
Others	742	18,041	24
Total	1,057	27,132	26

Source: DODE.

The Zambian Government's literacy programme is offered at three levels, described as follows:

- Basic literacy is the ability to read, write and count. It increases opportunities in people's lives in so far as understanding and acting on the basis of the written word is concerned.

- Functional literacy is the ability to perform a function (a duty, service, or business) by the individual who has acquired basic skills in reading, writing and counting in order to understand issues related to income-generating activities such as crop-growing, nutrition, health, childcare, and issues of household management.

- Integrated literacy is the ability for an individual to combine basic and functional literacy in order to improve the interaction between the environment and people's livelihoods.[20]

The Ministry of Community Development originally held the lead function for literacy in government, from 1965 until 2004, when the lead was transferred to the Ministry of Education. It was thought strategically useful for the Ministry of Community Development, Mother and Child Health to continue its involvement with functional and integrated literacy in view of the personnel that it already had engaged in the field. A new programme of functional literacy has since been developed by MCDMCH, dealing with topics such as civic education, management and skills education, entrepreneurship skills, income-generating skills, computer literacy, health and environmental education, numeracy skills, and reading and writing Zambian languages. The Ministry has not, however, been able to implement this programme because of a lack of funding. Some materials dating back to the 1990s are still in use. MoGE has also recently developed a new literacy curriculum and new

20 *Education for All 2015 National Review: Zambia.*

materials in seven languages which were expected to be introduced in 2015. Topics include entrepreneurship, fishing, human rights, HIV and AIDS, education, gender, food and nutrition, pig keeping, wealth, arithmetic, and communicative English.

The MoGE has also taken a number of initiatives to reinforce the institutional and human capacities to deliver YALE. These include the establishment of a National Adult Literacy Technical Committee in 2008, the training of the Ministry staff in YALE methodologies, and the convening of YALE stakeholder policy dialogues.

Youth or adult learners are able to sit the Grade 7 national examination but it is not known how often this happens. It seems that certificates of achievement are seldom issued to adult literacy learners. A national qualifications authority is being established and could play a role in the validation of certificates given to adult learners, depending on the structure of the future national qualifications framework.

At secondary level, youth and adult learners can join programmes offered by DODE at their centres. These are run on a 'night school' model (though, in fact, classes usually meet in the afternoon) by the provincial and district education authorities (since the administration of education has been decentralized) and make use of learning materials produced by the Zambian College of Open and Distance Education (ZACODE), which is based in Luanshya and is part of DODE. There is a widespread phenomenon of schools operating 'academic production units' to provide re-sit opportunities for candidates at secondary level. Some adult learners are assisted by correspondence study with ZACODE, but no data have been found on the extent of these programmes.

Technically, the TEVET system is an important part of the education available to young people and adults, but this is considered in depth in *Section 2.3*. TEVET is, however, considered part of the lifelong learning system discussed below.

Brief history, status of and trends in YALE

Brief history of YALE

Zambia has long experience of adult literacy programmes and campaigns. The first initiative, the *Basic Literacy Programme*, was launched in 1966 by the Department of Community Development under the Ministry of Rural Development. This programme ran from 1966 to 1971, with an emphasis on the three Rs i.e. writing, reading and arithmetic. It involved large numbers of participants (totalling 65,887 participants, of which 90 per cent females) with over 1,300 local volunteer teachers thereby making literacy a major national concern and not just the responsibility of few full-time government officers (Luchembe, 2016). Despite funding availability, this project

has not succeeded, due to a number of reasons, including: disconnection between the contents of the primers and the social context; inadequate and quick delivery of primers, which resulted in relapses into illiteracy for some participants; lack of supervision; problems of remunerating officers and instructors; and lack of interest among literacy officers.

A second initiative, the *Functional Literacy Programme – Agriculture*, with emphasis on agricultural production, was introduced in 1970. Its focus was on growing maize – the staple crop of the country. A radio programme on literacy was also introduced to supplement the project, broadcasting information on self-help programme, mother and child care, self-reliance and how to save money from their produce. This programme was jointly funded by the government and UNESCO. Although the programme had a big geographical coverage, with 80 per cent female participants, the total enrolment was disappointingly low. The total enrolment, from 1971 to 1973, was 2,928 participants. Also this programme suffered from inadequate budget, which affected the availability of inputs and resources such as books.

A third programme, the *Functional Literacy, Health and Nutrition Programme* started in 1978 and introduced topics on health and nutrition into the state-run functional literacy programme. This programme, which has benefitted from the collaboration between the Ministries of Education, FAO and WHO, was initially well funded, but encountered funding challenges later on. Also, the project evaluation found that the primers were not relevant to the peculiarities of different regions. And a study by UNESCO, in 1989, identified lack of continuing education and lack of relevant instructional materials, as responsible for the relapse into illiteracy of some participants. In addition, the programme lacked human resources such as teachers.

The most recent programme was the *National Literacy Campaign*, ran for seven years, from 1992 to 1998. The goal of the campaign was to reduce illiteracy to 12 per cent by the year 2000. The beneficiaries were identified as 'the underprivileged women and men who had attended school and those who had relapsed into illiteracy'. In 1992, the government established the Zambia National Alliance for the Advancement of Literacy (ZAALIT), with the main objective to design and implement a campaign to eradicate adult illiteracy. By 1993, ZAALIT had established over 1,000 classes with an enrolment of 25,243 students. However, like other previous campaigns ZAALIT was also faced with lack of adequate funds. By the end of 1998, some 98,701 people had participated in the campaign.

Recent developments and prospects in youth and adult literacy

Within the framework of EFA movement, Zambia has adopted the EFA Goal 4 on youth and adult literacy, and has strived to achieve a 50 per cent reduction in illiteracy by 2015.

In 2004, a few years after the launch of EFA, a total of 33,157 adult learners were enrolled in institutions offering literacy classes, out of which 14,391 were males and 18,766 were females.[21] In 2006, 36,523 learners attended literacy classes and one year later there were 2,091 literacy classes with 41,894 learners (9,750 males, 32,324 females).[22]

However, the status of adult literacy in Zambia suggests that all the interventions described above have not had much impact. In fact, the latest data (UNESCO 2014) indicate that Zambia, like 51 of the 87 countries with data, is still far from achieving the literacy goal. While the national target set for 2015 was to halve the illiteracy rate from 32.8 per cent in 2004 to 16.4 per cent in 2015, the actual illiterate rate was estimated at 13.07 per cent, equating to 1.9 million adult illiterates (EFA Review 2015). However, it is important to mention the big difference between data from Zambia CSO and those provided by UNESCO. Furthermore, there is a large difference between literacy data collected through individuals' self-declaration and those derived from a survey reading test. A reading test is a more precise measure of an individual's literacy skills and typically yields lower literacy rates than the self- or household declarations used in most censuses and surveys, which explains the observed drop in literacy rates for some years in countries like Zambia (see *Table 37* and *Figure 29*). In fact, data derived from Demographic and Health Survey (DHS) suggest higher level of illiteracy (36.6 per cent in 2015) than that presented in the Zambia EFA Report.

Table 37 Trends in youth and adult literacy in Zambia, 1990-2015

Year	Adult (15 years and older)						Youth (15 to 24 years)					
	Literacy rate				Illiterate pop.		Literacy rate				Illiterate pop.	
	MF	M	F	GPI	MF(000)	%F	MF	M	F	GPI	MF(000)	%F
1990	65.0	73.0	57.4	0.79	1,487	61.9	66.4	67.3	65.5	0.97	524	51.3
1999	68.0	76.3	59.8	0.78	1,742	63.3	69.5	72.6	66.2	0.91	630	55.1
2002	69.1	80.9	61.8	0.76	1,666	66.9	69.1	77.7	66.3	0.85	614	60.1
2007*,a	61.4	71.9	51.8	0.72	2,478	63.3	64.0	70.3	58.5	0.83	864	58.2
2015*,a	63.4	70.9	55.8	0.79	2,953	60.2	65.8	69.4	62.1	0.89	1,029	55.2

Notes:
* UIS estimation. a: Data based on reading test in a national household survey.

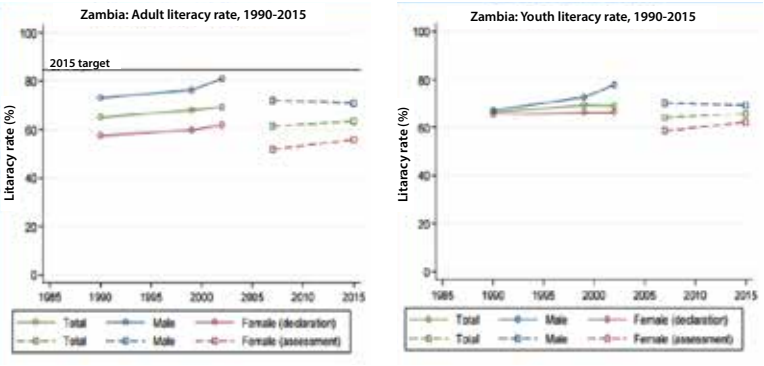
Source: UNESCO Institute for Statistics, 2013.

21 Zambia EFA 2015 Review, 2014.
22 NIF III p. 32, 33.

It is striking to mention that data based on reading test indicate very minor changes in youth and adult literacy rates between 2007 and 2015, suggesting negligible impact of the different literacy programmes and initiatives undertaken in Zambia.

Care should be taken when analysing trends over time, particularly when comparing the data and indicators based on self-declarations and those derived from reading tests. Also the concept of literacy has evolved over the years. An important development in recent years is an increased emphasis on functional literacy and a view of literacy as a continuum of skills that cannot be fully captured with traditional dichotomous measures of literacy.

Figure 29 Trends in youth and adult literacy in Zambia, 1990-2015



Source: UNESCO Institute for Statistics, 2013.

Note: Literacy rates for 2007 and 2015 are based on a reading test in a Demographic and Health Survey (DHS), literacy rates for other years are based on self- or household declaration of literacy skills in a national survey or census.

The above caution in interpreting data should not conceal the fact that YALE remains an important challenge to be addressed by the Government of Zambia, as the national development policy identified literacy as a way of fighting poverty and tackling issues of learning support for children, amongst other things.

Also, despite a large participation of females in different literacy programmes and initiatives, the illiteracy continues to be more prevalent among females than males, with estimated literacy rates at 55.8 per cent and 70.9 per cent, respectively, in 2015. Also, illiteracy is more pervasive in rural than urban areas. Furthermore, regional disparity is noticeable, as literacy rates in provinces like Copperbelt and Lusaka are estimated to be more than 80 per cent, compared to 61 per cent in Northern Province and 54 per cent in Eastern Province (CSO, 2010).

In terms of prospects, the rapid expansion of basic education in Zambia is undoubtedly a powerful asset to enhance youth and adult literacy rates in the medium and long terms. Research evidence shows that the spread in literacy is determined by the population growth, the pace in universalizing primary/basic education, and the maintenance or follow-up to literacy to avoid relapses into illiteracy. While Zambia can count on the development of formal education to eliminate illiteracy, it is important to ensure that basic education is made compulsory by law (to minimize dropout) and that the quality of education is enhanced to prevent relapses into illiteracy. Nevertheless, given the current low levels of literacy among adults, Zambia has still to invest on adult literacy if its objective to eradicate illiteracy has to be achieved.

Finally, it should be noted that the YALE challenge is a global one. Findings from the global review of the EFA decades suggest that, apart from the worrying fact that over half of the countries in the world have no data to assess progress, investments in YALE have been inadequate, inefficient or poorly designed. The relative lack of attention, internationally and nationally, to EFA goal 4 has been well documented (Robinson 2005a; UNESCO 2007). Depending on country contexts, this situation can be explained by lack of political commitment, inadequate YALE policy, lack of funding, etc.

Key issues and challenges in YALE in Zambia

Despite different initiatives by the Government and stakeholders, YALE practice and provision still remain a challenge in Zambia. The main issues identified in recent years can be grouped into four categories:

(i) Policy challenges: these relate to poor coordination and monitoring of different providers and their YALE programmes, weak administration and implementation structures in MoGE, lack of accurate YALE statistics, and weak monitoring and evaluation strategies. Besides, most of the existing YALE programmes are still based on the traditional concept of literacy, i.e. basic skills in reading, writing and numeracy, rather than the evolving notion of literacy as a continuum of knowledge and skills in the lifelong learning perspective.

(ii) Access and equity related-issues: due to lack of adequate infrastructure, equipment and learning materials, especially for people in rural setting and those with disability.

(iii) Inadequate structures and capacity, and poor public funding: leading to low and erratic remuneration for facilitators/instructors, low staff motivation, and inadequate infrastructure and equipment.

(iv) Quality issues: due to the limitation in the language of instruction, lack or inadequate teaching and learning materials, lack of trained staff in YALE methodology and pedagogical skills in adult learning. It was reported, for example, that due to lack of teaching and learning materials, some YALE centres use materials that are meant for children. The limitation in languages of instruction has also affected production of materials for teaching and consequently excludes people who are not familiar with the selected language. Also, there is heavy reliance on volunteers leading the learning groups.

Policy issue 1: Lack of a comprehensive national YALE policy and weak reflection of lifelong learning perspective in YALE programmes

Despite the fact that YALE is mentioned in all education policy documents, as part of the strategies to address the literacy challenges, YALE provision is still poorly regulated and weakly coordinated, with little policy guidance, due to lack of policy foundation. This piecemeal approach to YALE practice and provision does affect the effectiveness and the efficiency of this subsector. Beside, most YALE programmes in Zambia are still based on the traditional concept of literacy, rather than the lifelong learning perspective.

Evidence

While Zambia has made substantial progress in expanding formal basic education, and included in different policy documents its intention to eradicating illiteracy, the country does not have a deliberate YALE policy, nor a policy on lifelong learning. Mulenga (2007) notes that the lack of YALE policy probably explains why the literacy statistics in Zambia have never been impressive by any standard.

Indeed, adult literacy was included in many national plans and policies, since the country's independence in the 1964. Some were more specific and dedicated one of their priorities to literacy but all advocated for a better quality, access and equality for YALE. Moreover, at an international level, Zambia was involved in EFA, MDG and SDG agendas, and committed to achieve significant progress in the education sector, including literacy domain.

The absence of a national policy on YALE is manifest through: the poor coordination and monitoring of different providers and their YALE programmes; the poor regulation, and the weak administration and implementation structures in MoGE; the lack of YALE statistics, and monitoring and evaluation strategies.

Lack of policy on YALE has even been acknowledged by a Minister of Education, Geoffrey Lungwangwa, in 2009, when he stated that 'the government would have a national adult literacy policy in place soon' (Luchembe, 2016). In 2007, the Ministry of Education made an attempt to develop a policy on YALE, through a consultancy contract with Zambia Open University. In the same year, the Permanent Secretary Ministry of Education appointed an adult literacy technical committee comprising members from different constituencies, namely, civil societies, faith based and Government ministries to contribute to the draft policy on behalf of their respective organisations, taking into account the consultant report. This committee was also tasked to spearhead research in YALE provision and practice. Alongside these initiatives, civil society with PAF's constant contribution to YALE provided a great number of publications and studies and also required improvements concerning literacy in the country.

However, all these initiatives had difficulties to reach their objectives and have not fully achieved their targets. This was due to, amongst other issues, a lack of a firm foundation that would have ensured a good coordination between the different bodies providing literacy services. Currently twenty-five different organisations, including Civil Societies and Faith Based Organisations (FBOs), in addition to three line ministries (MoGE, the Ministry of Agriculture and Cooperatives and the Ministry of Local Government and Housing), conduct adult literacy programmes in Zambia as either basic literacy or functional literacy or both.

As mentioned earlier, the draft policy on YALE, developed by DODE in 2009, which would provide a solid basis and fulfilled a vital role by regulating, coordinating and establishing standards for YALE, has never passed; the Cabinet Office was in favour of a YALE policy integrated in a revised education plan, rather than a standalone policy.

Thus, adult literacy education practice and provision in Zambia remains, until today, uncoordinated, with little national policy guidance. The objectives planned through national plans and the other various bodies turn out to be disharmonised and not as efficient as it could be. The lack of a comprehensive national policy on YALE has certainly affected the development of this subsector, and can be an explanation of the stagnation or the reduction recorded in adult literacy rates over the recent years. Also, according to many education stakeholders, most of existing YALE programmes in Zambia are still based on the traditional concept of literacy, i.e. ability to read, write and calculate, rather than the evolving notion of literacy conceived within the lifelong learning perspective.

Discussion

A sound policy and legal framework is critical to provide clear direction and solid foundation for a long-term development of YALE in Zambia. In the current context of mainstreaming the education 2030 agenda, this offers an opportunity to align YALE policy with the Sustainable Development Goals, especially in the perspective of lifelong learning.

Traditionally, literacy has been interpreted as referring to the most basic of skills in reading, writing, and numeracy. Nowadays, however, it is found more useful to consider literacy in terms of a continuum of knowledge, skills, attitudes, and values, still starting at a basic level, but moving on through increasing levels of fluency and complexity, to include, for instance, the ability to use computers and other modern technology for self-directed learning. Very basic literacy is very important in giving self-confidence to adult learners, but may not be sufficient for developmental purposes. Investment in foundation literacy can deliver significant returns only if that foundation is built on to become sustainable and lead to further (independent) learning. As with building a house, a good foundation is essential, but on its own does not provide the wished-for shelter. It is for this reason that Sustainable Development Goal 4 emphasizes the need not only to 'ensure inclusive and equitable quality education' but also to 'promote lifelong learning opportunities for all'. The focus on inclusive, equitable, and quality lifelong learning opportunities for all also underpins the Incheon Declaration adopted at the World Education Forum (Incheon, Republic of Korea, 19–22 May 2015) and the *Education 2030 Framework for Action: Towards education and lifelong learning for all* discussed in Incheon and adopted at the high-level meeting on 4 November 2015.

The *Education 2030 Framework for Action* clearly states that: 'The right to education begins at birth and continues throughout life; therefore the concept of lifelong learning guides Education 2030. Beyond formal schooling, flexible lifelong and broad learning opportunities should be provided through non-formal pathways and through stimulating informal learning.'

A strategic approach to lifelong learning is described as follows: 'Beginning at birth, lifelong learning should be embedded in education systems through institutional strategies and policies, adequately resourced programmes, as well as robust partnerships at the local, regional, national and international levels, to ensure opportunities for all age groups including adults. Special measures are needed to address the needs of adult learners and millions of children, youth and adults who remain illiterate. To ensure the acquisition of new knowledge and skills, countries should institutionalize mechanisms and processes to assess the quality and quantity of the skills available and ensure that curricula and education and training systems

are responsive to the needs of the labour market and society. Cross-sector approaches traversing education, science and technology, family, employment, industrial and economic development, migration and integration, citizenship, social welfare and public finance policies should be used.'

Some of the relevant targets under discussion include: (i) A percentage increase (to be determined nationally), by 2030, in the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (Target 4.4); (ii) By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations (Target 4.5); (iii) By 2030, ensure that all youth and at least a percentage of adults (to be determined nationally), both men and women, achieve literacy and numeracy (Target 4.6).

In the same vein, African education ministers meeting in Kigali, Rwanda, for the Sub-Saharan Africa Regional Ministerial Conference on Education Post-2015 (9-11 February 2015), agreed on the following statement: 'We recognize the high percentage of youth as a potential asset to be harnessed for Africa's transformation. Noting the high adult and youth illiteracy levels, particularly of girls and women, and the huge numbers of out-of-school children and youth, we are determined to ensure that all youth and adults, especially women, have access to continuous lifelong learning and functional literacy, numeracy and requisite skills programmes for life and work. We commit to the use of mother tongue instruction before transiting to use of national/international languages for literacy programmes. We further call for the promotion of literacy programmes at the workplace'.[23]

The African Education Ministers meeting also recognized the policy challenges for YALE, when it highlighted that 'literacy provision is not an unusual issue in the world, including in this region, where every country nonetheless established some form of literacy provision and has at least some references to literacy in general development policies and plans. However, only few of them have overt, ratified national literacy policies'.

Uganda is an exception that can inspire Zambia and other countries in the setting of a standalone policy concerning YALE. Indeed, in 2002, Uganda established a National Adult Literacy Strategic Plan (NALSIP), for the time period 2002/3 and 2006/7. This Plan provided a strategic direction for provision of adult literacy services in the country and increased financing of adult literacy both from the Government of

23 *Sub-Saharan Africa Statement on Education Post-2015* (Kigali Statement).

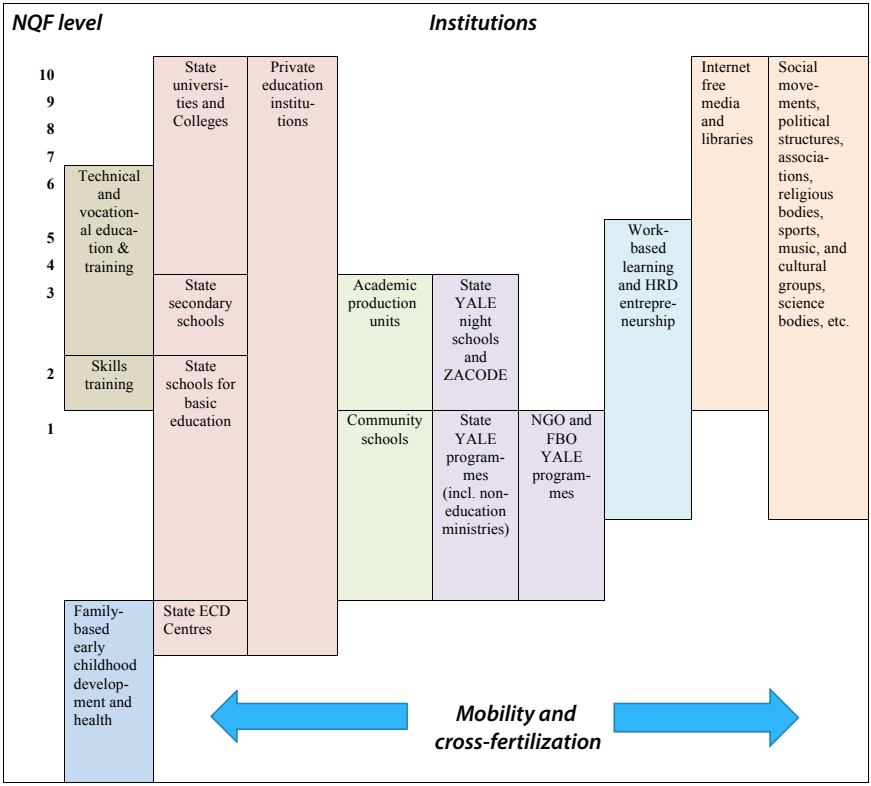
Uganda and development partners. The overall objective of NALSIP was to attain 50 per cent literacy (of the then 7million non - illiterate population), which was an ambitious target of turning 3.5 million illiterates into literates by 2007. The plan also targeted an equitable access to basic and continuing education for women and out-of-school girls. In order to consolidate it, NALSIP was followed by the National Action Plan for Adult Literacy (NAPAL) which covers the period of 2011-2016 and is focused on expanding access to and improving quality of adult literacy services through enhancing capacity of implementers, strengthening coordination and management, and collaboration and partnerships. NALSIP had many positive impacts on YALE in the country. Following its adoption and the launch of NAPAL, the quality of learning has been improved and the knowledge and skills of adult literacy facilitators/instructors and community development workers involved in the programme have been strengthened, which has heightened the demand for higher level training for adult literacy learners and instructors. Even though NALSIP has met some challenges and its five-year-implementation reached out only 1,234,889 adult learners out of the targeted 3.5 million non-literates (constituting only a 35 per cent achievement in enrolment). These two initiatives contributed to improving Uganda's adult literacy rate which increased from 68.14 per cent in 2002 to 73.86 per cent in 2015, ranking the country amongst the best performers in the sub-Saharan Africa region[24].

In view of the requirements emanating from the Sustainable Development Goals, as discussed above, it would be appropriate for Zambia to set about drafting a broad education policy based on the organizing paradigm of a learning society or a lifelong learning system. Such a system would consider the learning needs not only of children but also of youth and adults. It would allow and facilitate both vertical and horizontal paths for learners to improve their levels of education. In deciding to establish a national qualifications authority, Zambia has already taken an important step in this direction.

Although much more discussion will be needed, the following diagram might suggest the beginning of a representation of such a system in Zambia. Clarified policy on YALE, and provision for YALE in education legislation, would provide clear direction and a firm foundation for the long-term development of YALE in Zambia.

24 UIS

Figure 30 Emerging learning society or lifelong learning system in Zambia (for discussion)



RECOMMENDATIONS

- The education policy currently being written by MoGE (and the related revised education bill) should contain enabling provisions concerning YALE at both primary and secondary levels. It should further empower MoGE to establish a range of YALE programmes from a very basic level of education to secondary and further education level.
- Zambia should frame its new education policy within a lifelong learning paradigm in line with the requirements of the Sustainable Development Goals.
- Government, through MoGE, should support the finalization of the Youth and Adult Literacy Policy drafted in 2009, in collaboration with key stakeholders,

including CSOs and FBOs. This policy should address the problems related to regulation, coordination, standardisation and funding, as well as issues regarding data, monitoring and evaluation of YALE in Zambia.

- Provision should also be made for the creation of a national council on YALE, to be appointed by the minister, with the main function of bringing together all actors in YALE in a think tank, and for this council to produce an annual report on YALE (not just on its own activities).

Policy issue 2: Limited and inequitable access to YALE

In light of the high potential demand for YALE (uneducated youth and adults, including school dropouts and out-of-school adolescents), the low and decreasing enrolment in literacy centres is a matter of concern.

Evidence

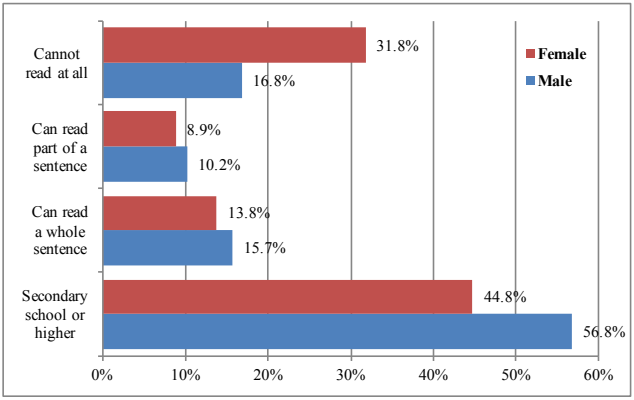
Recent literacy data, from Demographic and Health Survey 2013-2014, suggest that there are more than 2.2 million Zambian youth and adults aged 15-49 years who never went to school or who have minimal literacy skills. This population represents the primary target for YALE, to which should be added the school dropouts and out-of-school adolescents who will progressively join the adult population. The adult illiterates aged 50 years and above are also part of potential demand for YALE.

However, in 2015, DODE reported that the total number of adults and youth enrolled in 1,057 literacy centres decreased and stood at 27,132 learners. It should be noted that, in 2004, a total of 33,157 adult learners were enrolled in institutions offering literacy classes, out of whom 57 per cent were females. In 2006, the number of learners attended literacy classes reached 36,523 and one year later there were 2,091 literacy classes with 41,894 learners, out of whom 77 per cent were females.

It is striking to note that, with more than 2.2 million illiterate adults aged 15-49, the number of the learners engaged in adult literacy programmes has never reached 50,000 over the last ten years. It is clear that the current level of access to YALE is not sufficient to make an impact on the extent of need. Greater efforts must therefore be made to increase access. Through *Figures 31* and *32*, presenting respectively, the percentage distribution of adults (15-49) by level of literacy and by level of education attended, one can assess how critical the issues of adult illiteracy are in Zambia. It is important to note that, in the 2013-14 DHS, the literacy status of respondents was determined by assessing their ability to read all or part of a simple sentence in any of Zambia's seven major language groups. The literacy test was administered only to respondents who had less than secondary education.

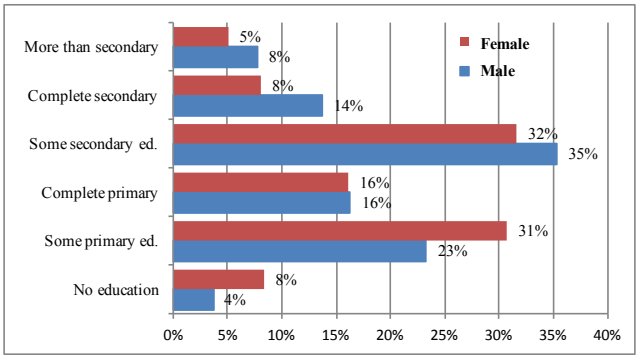
While more recent data show that two-thirds of those engaged in YALE are women, DHS indicate that men are more likely to be literate than women. In fact, the literacy rate for male adults (15-49) is estimated at 82.7 per cent, compared to 67.5 per cent for female adults (15-49). Also, Figure 33 indicates that men are more educated than women in all categories.

Figure 31 Adults age 15-49 by literacy status and gender



Source: Zambia DHS 2013-2014.

Figure 32 Adults age 15-49 by highest level of schooling attended or completed

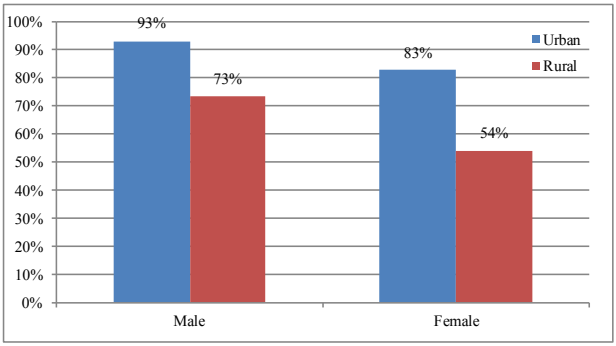


Source: Zambia DHS 2013-2014.

DHS data also indicate that literacy varies notably by place of residence. As displayed in *Figure 33* and *Figure 34*, 83 per cent of women residing in urban areas are literate, as compared with only 54 per cent of rural women. Literacy is highest among women

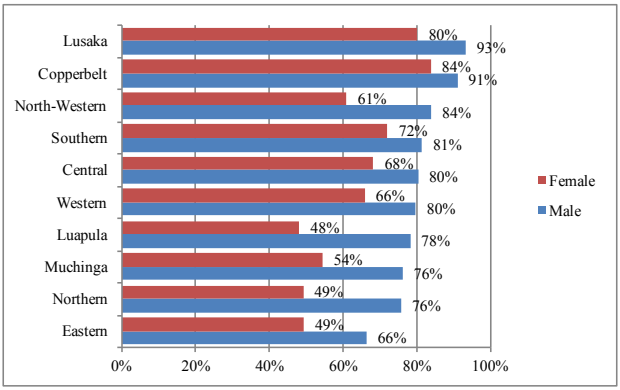
in Copperbelt (84 per cent) and lowest among those in Luapula (48 per cent). Literacy increases substantially with increasing household wealth, ranging from 38 per cent among women in the lowest wealth quintile to 93 per cent among those in the highest quintile. This finding confirms the positive association between economic status and literacy. Moreover, the problem of illiteracy continues to be pervasive among marginalized groups such as women, children and people with disabilities.

Figure 33 Adult age 15-49 literacy rates by place of residence



Source: Zambia DHS 2013-2014.

Figure 34 Adult (15-49) literacy rate by gender and province



Source: Zambia DHS 2013-2014.

However, Government capacity to expand access to YALE is limited by a number of factors, including funding. For example, MCDMCH has a new functional literacy programme, which it cannot implement, due to lack of funding. Similarly, the

DODE's basic literacy programme has been making very slow progress, mostly due to lack of funding, inadequate structures and weak capacity. Previously (in the process of developing the draft literacy policy), concerned stakeholders have suggested 3 per cent of the education budget as a realistic target for YALE funding.

During the review mission, Zambian education stakeholders pointed out the need to expand access to literacy, including through mobilizing all relevant partners, such as CPs, employers, NGOs, etc. to contribute directly to the provision of literacy. They noted that very few employers or large statutory bodies have YALE programmes for their employees. The same applies to the defence force and the police. A number of NGOs and faith-based organizations (FBOs) are active in the field of YALE, but on a limited scale. It seems also that some providers of literacy and youth and adult education charge learners fees.

Discussion

Achieving effective literacy programmes is a key way to improve the prospects of young and adult Zambian who cannot be included in conventional schools, and those of their children. As long as access to YALE will remain a challenge for people, especially those in rural areas, it will prevent them from improving their well-being, increasing their professional opportunities and understanding their environment and their capacity to adjust to its dictates. Moreover, gaps between rural and urban areas will keep on widening, leaving most of the population lagging behind.

Women's participation in YALE can yield important benefits in terms of gender equity, improvement in family health, children's education, and other economic and social benefits. It is equally important that men engage in YALE to ensure an improvement in national literacy level, and maximize its impact on the country's economic development. It appears however, that YALE programmes only attract few men, due to many reasons. Some of them are related to the physical environment, administrative and pedagogical practices of education and training that do not necessarily fit their age and status in society. Another barrier has to do with current life situations. Men, especially in rural areas, are usually busy with other activities and they see no reason to participate in adult literacy programmes as they are expected to provide for their families. One would, at least, want to avoid a situation in which men oppose YALE or the participation of women in YALE programmes.

Access to YALE programmes can also be broadened and strengthened with participation of private sector entities and other large corporations. Within this framework, YALE programmes could be developed for staff members. This would improve levels of education of staff members and, at a larger scale, would contribute

to better communication and productivity within companies. In some companies, in other countries, such training is conducted by the company providing half the time that is needed while the workers offer the other half.

As Zambian CSO representatives concur that the programmes of some NGOs and FBOs appear to be of good quality, such organizations can serve as a proving ground for new approaches to YALE and possibly influence the quality of YALE programmes offered by others. It may be that NGOs and FBOs have relationships with communities that are hard to reach because of their remoteness or for cultural reasons. If funding is the main constraint on the expansion of such useful NGO and FBO programmes, the Government should consider funding agreements with them. This may prove a cheaper option for the government than mounting the whole programme itself.

The charging of fees to young people and adults participating in education programmes probably serves as a disincentive to attendance, particularly for those who are most disadvantaged and in need of education. Since primary education is now provided free of charge it would seem out of place to charge youth and adults for the equivalent level of education. According to some stakeholders met during the review, the amount raised through charging fees was in any case small, and probably nullified by the cost of administering the money.

RECOMMENDATIONS

- MoGE should convene a meeting (or meetings) with leading figures in the private sector, and leaders of other large corporations, encouraging them to mount YALE programmes for their staff members. DODE might encourage such initiatives by offering free or subsidized learning materials, training of facilitators, and monitoring and evaluation. DODE might engage relevant trade unions in this connection as well. Close cooperation with TEVET will be essential to combine YALE with skills training.
- DODE should enter into discussions with NGOs and FBOs engaged in YALE with a view to enabling them to expand their YALE programmes. The basis for discussion might be that the government would pay a certain amount for each learner who is able to achieve a certain level of education, subject to testing at the end of the course.
- DODE should conduct or commission a gender survey concerning YALE to better understand how gender relations affect participation in YALE programmes, and the interests of men and women that would motivate them to participate in YALE in greater numbers. A survey could also be carried out to profile YALE participants in terms of socio-economic conditions, livelihoods, language, awareness of educational opportunities, main challenges they face, and aspirations.

- DODE should devise a plan for expanded access to YALE, considering all recommendations made in this policy review concerning YALE. Due weight should be given to rural areas and to provinces with the lowest literacy rates.
- MoGE should approach Cabinet with a submission on YALE, advocating the various changes that are needed. Part of the submission should be a plan to increase access to YALE. It should also be proposed that funding for YALE should increase in phases to reach 3 per cent of the education budget.
- Government should ensure that participants in government YALE programmes, at the equivalent to primary level education, should not be charged user fees.

Policy issue 3: Inadequate funding, structures and capacity for YALE

While potential demand for opportunities to learn is high among Zambian youth and adults, an effective expansion of access to YALE is hampered by weak institutional capacities and structures as well as lack of funding.

Evidence

As discussed in the previous section, the stark difference between the potential demand for literacy, represented by the 2.2 million youth and adult illiterates, and the actual enrolment in literacy programmes (27,132 learners) in 2014 clearly suggests problems with the country capacity to effectively deliver YALE. According to ZANEC (2016), public funding to YALE was 0.01 per cent of total education budget in 2014 and in 2015. Hence, ZANEC urges the Government to increase its capacity to respond to these needs, as was also suggested by most CSOs consulted in the framework of this policy review. As mentioned early, it has been found for instance, that the MCDMCH has a new functional literacy programme but has not had the funding available to implement it.

The lack of funding is manifest through the poor status of YALE infrastructure and learning facilities. The infrastructure used for adult learners in Zambia is either inadequate or dilapidated. Facilities, especially for people with disabilities, are scarce, even non-existence, which reduce drastically their opportunities to have adequate classes that would meet their specific needs. Indeed, according to the Education Public Expenditure Review, no funds were allocated to YALE for infrastructure development between 2012 and 2015. Also, the 2016 budget for literacy has not mentioned any funding for equity and special education needs[25].

25 ZANEC Parliamentary Paper on the education budget estimates for the 2016 financial year presented on 22nd October 2015 to the expanded committee on estimates.

As for existing structures and capacities, DODE, the Directorate of Open and Distance Education, as the government institution with responsibility for dealing with this demand, seems to be misnamed and to lack some of the specialized management and professional staff that are required, at all levels of the government.

The Zambian College of Distance Education (ZACODE) is not living up to its potential as an alternative provider of secondary and further education. One of the main reasons for this might be that it is hampered by a too close association with the Ministry and overly bureaucratic decision-making processes. As has been found with open learning institutions in other countries, a degree of autonomy might give it the ability to successfully manage complex logistics, IT systems, and learner support systems. Although Zambia has experience in the use of radio for education, it seems that this knowledge is not being exploited. Similarly, other ICTs such as mobile phones, are not being fully utilized in education.

The University of Zambia's Faculty of Education reportedly has 12 lecturers in adult education, and over 100 students graduate with qualifications in adult education every year, but no tracer study has been done to find out what they are currently doing, what their employers think of them, or what the former students think of their training. Contact between the university and the ministry seems to be minimal.[26] Discussions with Zambian literacy stakeholders suggested that most of these graduates (in adult education) are not serving in the area of YALE.

Discussion

A number of measures can be taken to improve the policy environment, the capacity of various bodies to deliver YALE programmes, and the quality of YALE programmes. However, an effective implementation of such measures, for a significant expansion of YALE, requires an increase of funding.

Lack of funding has been cited as one of the reasons of failure in past literacy programmes and campaigns conducted in Zambia. Most of these programmes failed due to inadequate funding for regular and appropriate remuneration for literacy officers, transportation, and learning facilities. According to Luchembe (2016), lessons from these programmes also suggest the need for strategic and comprehensive planning for such major assignments as the eradication of adult illiteracy. A piecemeal approach to such important issues not only frustrates the people directly involved (as well as volunteers) but does raise issues of credibility of the results obtained.

26 Interview with Amos Musonda Luchembe at UNZA, 17 June 2015.

Luchembe (2016) also notes that, in a number of African countries, adult basic education is sidelined, at the government policy level, and therefore has weak structure and receives little funding (Luchembe 2016). Referring to Zambia, Mulenga (2000) observed that: '*Continuing education is a Cinderella department functioning at the margins of public and ministry concerns, operating with minimal funds, physically carrying out its activities in [a] structure … a structure just within the perimeter fence of ministry, but almost far out of the marginalization of adult continuing education. Although there have been numerous official statements [on] adult education and literacy by the government, there has been no consistent and coordinated policy on adult education and literacy. This is partly due to the initial colonial neglect by the government, but also reflects the lack of a coordinated "policy lobby" by those involved in funding and providing adult education*'.

As mentioned earlier, expanding access to YALE, especially to young women, people in rural areas, and people with disabilities, would contribute to reduce inequality, improve individuals and national development prospects. In Zambia, potential demand for opportunities to learn is high among adult population. However, if MoGE is to provide access to learning on a larger scale it must have in place appropriate capacity and structures, which implies adequate funding.

RECOMMENDATIONS

- MoGE should be capacitated, with adequate human and financial resources, to ensure policy development and implementation, drafting of laws, regulation, development and enforcement of standards, collection and analysis of data on programmes, negotiation of agreements with other bodies, quality control, coordination of various providers, planning, budgeting, and financial control, grant-making, monitoring and evaluation, and the supervision or carrying out of research. Structures at sub-national levels also need strengthening to ensure effective programme implementation and monitoring.
- MoGE should undertake the profiling of the staff in place for YALE and the restructuring of DODE (and perhaps also MCDMCH, since they do most literacy work) to ensure that there is sufficient management and professional posts for YALE to carry out what is expected of it, considering the large number of youth and adults in need of learning.
- Once new structures are put in place, a training plan should be developed and implemented to ensure that staff members have the skills that are required of them.
- The Zambian Government should request assistance from relevant experienced institutions such as UNESCO, the Commonwealth of Learning, etc., for re-structuring ZACODE as a semi-autonomous college of open learning with a

clear mandate and funding arrangements. The college might focus on Grade 11 and 12 courses, and certificates and diplomas where there is sufficient demand to make open learning a viable option. Radio and ICTs should be fully exploited for open and distance learning.

- The University of Zambia, in collaboration with the MoE, should conduct a tracer study of graduates in adult education from the university over, say, the past ten years. A forum for consultation between the university and the ministry should be established and both parties should seek to identify research projects that can be carried out in the field of YALE. Practical teaching experience in literacy centres should be part of the training of adult educators.
- Infrastructures for YALE should be rehabilitated, expanded and constructed. A particular attention should be paid to ensure that all infrastructures respond to the needs of Learners with Special Education Needs so as to enhance access to literacy programmes for vulnerable groups.

Policy issue 4: Issues related to quality, results, efficiency, and reputation

Some stakeholders expressed doubt about the quality of the YALE delivered by many institutions, due to lack of qualified trainers, inadequate infrastructure and learning materials, as well as lack of national standards, quality assurance mechanisms or national assessments of learning achievement and curriculum in YALE.

Evidence

Zambia has a long history of literacy programmes, going back to the 1960s. It has some excellent literacy programmes, like "Reflect and HIV/AIDS", conducted by the People's Action Forum, which won the UNESCO King Sejong Literacy Prize in 2008. The trouble is that the various programmes have hardly ever been described in detail or evaluated. It is remarked in the draft literacy policy document that government literacy activities have not been formally evaluated since 1971.[27] It is likely that some programmes are out of date.

As discussed earlier, Zambia's experiences with literacy programmes and campaigns have not proved successful and have not yielded expected results, due to a number of reasons, including inadequate primers, disconnection between literacy contents and the social context. The Zambian stakeholders consulted during the review mission were unanimous that the issues discussed in the previous sections, i.e. inadequate

27 *National Policy on Youth and Adult Literacy 2015* (draft), p. 12.

YALE policy, poor structures, weak institutional capacity and lack of funding, badly affect the quality, results, efficiency, and reputation of YALE.

Linked to the above mentioned factors, is the lack of qualified literacy instructors. In Zambia, much work in YALE appears to be carried out by volunteers. It is an achievement to have persuaded young people to give their time in this way, and this, indeed, may have been the only solution available, given the paucity of resources. There may, however, be consequences in terms of the amount of time that volunteers can actually give on a daily or weekly basis, as well as in terms of the quality of service delivered. Also, the high turnover of volunteer workers can also prevent the build-up of expertise and constitutes a threat to effective literacy programme implementation.

Qualified instructors are not motivated to serve in YALE, due to inadequate remuneration, poor status and reputation, and low career development prospects. While the ministry and trade unions are moving towards a professional council for school teachers, there is no equivalent move for those engaged in YALE. The association of adult educators seems to be dormant.

Discussions with stakeholders also suggested that those engaged in YALE in Zambia do not seem to be regularly and constructively in touch with international bodies focusing on YALE, including the UNESCO Institute for Lifelong Learning, the International Council for Adult Education, and the Commonwealth of Learning. UNESCO structures such as its Institute for Statistics, HQ, Harare Regional Office for Southern Africa, and others, are not being engaged to the possible benefit of YALE in Zambia. Initiating partnerships with such organizations would help Zambia to learn from international experiences on YALE, benefit from their expertise and strengthen national capacity for YALE, which in turn, contribute to enhance the quality, effectiveness and efficiency of YALE.

Discussion

National standards, quality assurance mechanisms or national assessments of learning achievement and curriculum in YALE are important tools for measuring and monitoring progress in the field of literacy. This is of vital importance, especially for a field that has to demonstrate its value more energetically than more mainstream and traditional ones. Even though this remains a challenge for Zambia, some countries in the Sub Saharan Africa region took inspiring measures to cope with this issue. For instance, Kenya has set up a central body, Kenya's Department of Adult Education, which conducts literacy proficiency tests every year to determine the level of acquisition of learners. Through this Department, a total of 56,132 adults sat and passed the literacy proficiency tests between 2003 and 2006. In Lesotho,

all literacy providers can have their participants assessed by the Lesotho Distance Teaching Centre. In Uganda, annual proficiency examinations are prepared with the involvement of district-level supervisors of adult literacy programmes, and instructors participate in originating questions in all key learning areas. South Africa has state adult basic education examinations as well as state-recognised ones provided by two NGO assessment agencies[28]. These measures are a first but decisive step to improve YALE quality, efficiency and results.

As the learning content of adult literacy and education is clearly of fundamental importance, a unified curriculum would coordinate YALE providers' efforts and generate awareness of international and national concerns as well as the benefits of lifelong learning for learners. Even if curriculum, curriculum content and curriculum approaches do not seem to be prominent issues and matter for great debate in Zambia as in the whole continent, some countries take steps to address this issue. In Tanzania, for instance, curriculum revision has led to the development of a more effective Integrated Community-Based Adult Education (ICBAE).

The assumption is sometimes made that literacy is a relatively simple matter that can be addressed by teachers who have only a little more knowledge than those they are teaching. However, a frequent evaluator of literacy programmes on the African continent has pointed to the complexity of successful literacy programmes[29]. They give careful attention to what they deliver, on the so-called supply side. However, they also engender interest in what they offer by attending to the so-called demand side. They do this by careful analysis and consideration of the literate environment, to capitalize on how text is useful in a given context. They have to be aware of the opportunities for development in a community. Such opportunities might arise through the spread of managerial responsibility, or changes in the cultural, religious, or political environment. How text is being used in schools, workplaces, and households has to be considered. The language best known to learners is used as far as possible. Unless such groundwork is constantly undertaken, the changing context means that a literacy programme is likely to meet with rejection by all or some of its intended beneficiaries as not worth the effort. Successful YALE programmes invariably need to be led (if not implemented) by knowledgeable decision-makers and skilled educators.

Capacity for quality YALE provision is closely linked to the country's ability to train qualified staff that can carry out all the activities related to conceptualizing training programmes, and implementing them. Thus, a better professionalization of adult

28 The state and development of adult learning and education in sub-Saharan Africa Regional synthesis report, John Aitchison and Hassana Alidou, 2009.

29 Easton. 2014. Sustaining literacy in Africa: Developing a literate environment.

literacy instructors and recognition of their status would obviously have a significant impact on quality of teaching. In Lesotho adult education is considered as a specific profession, with the National University of Lesotho offering qualifications from Diploma to Masters (via distance education through the Institute of Extra Mural Studies), with plans to introduce a PhD programme. Graduates from these courses are recruited across many government services and NGOs and most receive increased remuneration at work in recognition of this qualification. Continuing education is provided via the Lesotho Distance Teaching Centre (LDTC). Some of these courses are free for volunteer adult education facilitators.

The weak current state of YALE in Zambia is mainly due to the minimal investment made by government in the past decade or two. This is hopefully about to change, since the Zambian Government has requested this review, and is presumably considering the implications of the Sustainable Development Goals. However, those working in the field must also encourage the investment of new resources in YALE by making every possible effort to design and carry out programmes that demonstrably show results and compare favourably with the best performer countries in the world. Much heavier investment is therefore needed in understanding existing programmes, their achievements, success factors, challenges, and lessons learned, which should inform future policy development in this important area.

RECOMMENDATIONS

The following steps could be taken in the short- to medium-term to improve the quality of YALE.

- MoGE should be empowered, within the usual public-service constraints, to employ full-time and part-time staff, to develop curricula and study materials, to monitor and evaluate programmes, and to transfer funds (based on agreements) to other ministries, NGOs, the private sector, and universities and research institutes so that such bodies can carry out agreed YALE programmes, engage in public advocacy of YALE, carry out research concerning YALE, provide technical support to partner organizations, and charge fees or exempt categories of learners from paying such.
- Government should conduct an evaluation of all literacy work and YALE centres under government auspices (for all the ministries involved). Private programmes could be included if the owners agree.
- Government should make it possible for participants in YALE programmes to be assessed and receive certificates. Such certificates should be registered on the national qualifications framework. At secondary level, national examinations can still be used, for the time being.

- MoGE should establish a robust database on all YALE programmes in the country and, through EMIS, integrate the main data gathered in the annual statistical bulletin of the ministry. The proposed national council on YALE should also play a role here.
- MoGE should formulate national standards for YALE professional educators through a participatory process and, in due course, obtain acceptance of these standards by the qualifications authority. Make YALE part of the professionalization of the teaching profession.
- MoGE should cultivate links, contacts, and exchanges with international and foreign organizations with a specialization in YALE.
- MoGE should employ as many graduates in YALE as possible to lead YALE programmes and gradually replace volunteers with staff members who are paid on the same salary scales as apply to the teaching profession. Those who work part-time or on short-term contracts should be paid pro-rata.
- MoGE should give awards and recognize in every way possible those who do excellent work in YALE.

References

ADEA (Association for the Development of Education in Africa). (n.d.). *Strategic orientation framework for non-formal education in a holistic integrated and diversified vision of lifelong education*.

African Development Bank, African Development Fund. 2006. *Multi-sector country gender profile*.

African Union; UNESCO. 2015. *Sub-Saharan Africa statement on Education Post-2015* (Kigali Statement).

Aitchison, J. and Rule, P. 2005. *A quick survey of SADC literacy statistics and projections*, Centre for Adult Education University of Kwa Zulu-Natal South Africa.

Aitchison, J. and Alidou, H. 2009. *The state and development of adult learning and education in sub-Saharan Africa Regional synthesis report*, UNESCO Institute for Lifelong Learning, Hamburg, Germany.

Banda, D. 2007. *Country Profile commissioned for the EFA Global Monitoring Report 2008, Education for All by 2015: will we make it?* Central Statistical Office. 2010. *2010 Census of Population and Housing,* Lusaka, Zambia.

Central Statistical Office. 2012. *2010 census of population and housing: National analytical report*.

Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. 2014. Zambia Demographic and Health Survey 2013-14. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health, and ICF International. Retrieved from: https://www.dhsprogram.com/pubs/pdf/FR304/FR304.pdf.

Commonwealth of Learning. 2009. *Assessment of the Zambian College of Distance Education*.

De Kemp, A., Faust, J., Leiderer, S. (2011), *Between high expectations and reality: an evaluation of budget support in Zambia, Synthesis Report,* Bonn / The Hague / Stockholm, BMZ / Ministry of Foreign Affairs/Sida.

Easton, P. 2013. 'Developing literate environments: Fleshing out the demand side of Education for All'. In: *International Journal of Educational Development, 34,* 3–10.

Easton, P. 2014. *Sustaining literacy in Africa: Developing a literate environment*. UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0022/002252/225258e.pdf.

Government of the Republic of Zambia. 2003. *The national policy for the Department of Community Development*.

Government of the Republic of Zambia. 2006. *Vision 2030*.

Government of the Republic of Zambia. 2009. *Second Report of the Committee on Education, Science and Technology for the Fourth Session of the Tenth National Assembly appointed on 24 September 2009*, Lusaka, Zambia.

Government of the Republic of Zambia. 2011. *Sixth National Development Plan 2011–2015*, Lusaka, Zambia.

Government of the Republic of Zambia. 2016. *2016 Budget Address by Hon. Alexander B. Chikwanda M.P, Minister of Finance. Delivered to the National Assembly on Friday, October 9th, 2015*.

Hamusunga, G. 2012. An Analysis of the performance of the Zambian education system. ZANEC.

Hanemann, U. 2015. Evolution *of literacy* campaigns and programmes and their impact since 2000. UNESCO.

Hanemann, U. 2015. *Expanding the vision: Literacy from a lifelong learning perspective* (draft).

Kam, O. F.; Magloiri, S.; Sanate Sabsonre/Tassembido, and Eleonore Ouedraego/Zenge. 2010. *Learning from Reflect experience in Burkina Faso*. Pamoja West Africa.

Linehan, S. (n.d.) *Language of instruction and the quality of basic education in Zambia*.

Luchembe, M. 2016. *A Reflection on the Past Trends in the Delivery of Literacy Education in Zambia: Challenges and Prospects*. In World Journal of Education Vol. 6, No. 1; 2016. Retrieved from: http://dx.doi.org/10.5430/wje.v6n1p13.

MESVTEE (Ministry of Education, Science, Vocational Training and Early Education). 2014. *Education for All 2015 national review: Zambia*. MESVTEE.

MESVTEE. 2015. *2014 Annual Progress Report*. MESVTEE, May 2015.

MESVTEE. 2015. *National policy on youth and adult literacy 2015* (draft). MESVTEE.

Ministry of Community Development, Mother and Child Health (Zambia), 2014. *Instructor's guide: Adult functional literacy*.

MoE (Ministry of Education, Zambia). 2003. *Strategic plan 2003–2007*. Ministry of Education.

MoE .2003. *Strategic Plan 2003 – 2007*, Lusaka, Zambia.

MoE .2007. *National Implementation Framework 2008 – 2010*, Lusaka, Zambia.

MoE 2008. *National Report of Zambia – The Development and State of the Art of Adult Learning and Education (ALE)*, Lusaka, Zambia.

MoE. 2010. *Education Sector National Implementation Framework III 2011–2015*. Ministry of Education.

MoE. 2011. *Sixth National Development Plan 2011–2015*. Ministry of Finance, January 2011.

Ministry of Education, Namibia. 2014. *Gender survey of the National Literacy Programme in Namibia*. Ministry of Education.

Ministry of Gender, Labour and Social Development. 2011. National Action Plan for Adult Literacy (NAPAL) 2011/12 - 2015/16, Kampala, Uganda.

Ministry of Gender, Labour and Social Development. 2008. *National Report On the Development and State of the Art of Adult Learning And Education (ALE) in Uganda*, Final Draft, Kampala, Uganda.

Ministry of Youth and Sport .2015. *2015 National Youth Policy*, Lusaka, Zambia.

Nawa Mwangala, P. (2008), *Comprehensive analysis of national budget prioritisation and allocations for child and women centred areas and costing of millennium development goals, Final Report*, Lusaka, Zambia.

PAF (People's Action Forum). 2008. *An assessment of the extent of adult literacy in Zambia*.

PAF. 2009. *Adult literacy: The way forward in Zambia*. PAF, July 2009.

PAF. 2013. *Provision of youth and adult learning and education in Zambia after Belem*.

PAF. 2014. *Report of national stakeholders' forum on youth and literacy and education in Zambia*.

PAF. 2014. *Strategy for accelerating YALE programmes in Zambia after Belem*. PAF.

UNESCO. 2012. *Malaysia education policy review*.

UNESCO Institute for Statistics .2013. *Adult and Youth Literacy National, regional and global trends, 1985-2015*, Montreal, Quebec.

UNESCO. 2015.'Regional overview: Sub-Saharan Africa'. In: *EFA Global Monitoring Report 2015*. UNESCO.

Walters, S.; Jin, Y,; Roslander, P. 2014. *Key issues and policy considerations in promoting lifelong learning in selected African countries: Ethiopia, Kenya, Namibia, Rwanda, and Tanzania*. UNESCO Institute for Lifelong Learning.

World Bank. 2015. *Education Public Expenditure Review in Zambia*, Washington, USA.

World Bank. 2015. *Zambia Education PER and PETS-QSDS at a Glance*, Washington, USA.

World Education Forum. 2015. *Framework for Action Education 2030* (draft).

ZANEC. 2013. *Parliamentary paper on the education budget estimates for the 2014 financial year presented on 28th October 2013 to the expanded committee on estimates*, Lusaka, Zambia.

ZANEC. 2015. *Parliamentary paper on the education budget estimates for the 2016 financial year presented on 22nd October 2015 to the expanded committee on estimates*, Lusaka, Zambia.

3.5 Monitoring and assessment of students' learning achievement

This section aims to propose recommendations by UNESCO to improve the current system and approaches to the monitoring and assessment of students' learning achievements (MALA) in Zambia. The Section presents first the current status of MALA in Zambia; then, four policy issues, which were identified as the most prominent in Zambia at the moment by the UNESCO expert team, are discussed. These issues are:

- The absence of a formative orientation of the current MALA system;
- The lack of use of MALA data to inform policy-making;
- The inadequate orientation of the current provision of Continuous professional development (CPD) programmes for teachers in MALA; and
- The lack of a comprehensive M&E system.

These four major policy issues are presented in terms of the evidence from the field, both national and international (where applicable). Each MALA policy issue is discussed in order to develop recommendations for policy implementation and action in Zambia.

The current status of MALA in Zambia

There is a trend worldwide for the establishment of a comprehensive framework of MALA so that all different sources of learning, monitoring and assessment data can lead to a coherent and integrated evidence base for improved decision-making and practice in education. This is a rallying cry to ensure that a better quality of education is offered to all stakeholders and targeted beneficiaries of the educational system. UNESCO (2005: 36) initiated such a framework within which context, learners' characteristics, enabling inputs, and outcomes are water tight and interrelated to improve the understanding of education quality. This is still an ongoing quest that can result in better quality learning, provided that there is a coherent and consistent system-wide approach to monitoring and assessment.

In line with this, in a review of research of students' learning outcomes, Chinapah et al. (2010: 4) argue that much must still be done to achieve the learner-centered pedagogy required to make education quality for all (EQFA) genuinely inclusive and attainable. Moreover, after reviewing the three dominant assessment systems for learning achievement – classroom assessment, examinations, and large-scale system-level assessment – Clarke (2012: 6–8) concluded that it is imperative to differentiate between assessment as learning or for learning (formative), which is mostly done through classroom assessment; and examinations and surveys serving as assessment of learning (summative). To this end, a unified framework is proposed for 'an understanding of what an effective student assessment system looks like and how countries can build such system'. Therefore, a good MALA should capture the relationships and interactions between the teacher and the learner. Several surveys of the determinants of student learning outcomes and academic achievement in Africa have pointed in this direction, finding learner-teacher interactions measured in terms of attitudes and classroom behaviours to be the most important determinants of student learning outcomes and academic achievement (see, for example, Chinapah et al., 2000).

Zambia is well known for its regular and continuous efforts to assess, examine, and monitor students' learning achievements over several decades. Zambia is well known for its framework for learning assessment and, at first sight, its institutional capacity for assessment looks extremely well-developed. The country has a long-running, secure examinations and assessment programme managed by the Examination Council of Zambia (ECZ). The main policy milestones are still those that were established through ECZ Act (1983) and the educational policy document Educating Our Future (1996). These policy milestones are championed by ECZ, which up to now has had the lion's share of responsibility for MALA in Zambia. ECZ has the unique mandate to conduct regularly:

- National examinations at grades 7, 9, and 12, for all subject areas;
- National large-scale assessment (NLSA) programmes for Grade 5 students to measure their literacy and numeracy skills;
- International large-scale assessment (ILSA) surveys for the Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ); and
- Surveys for the OECD's PISA for Development initiative to support evidence-based policy making in emerging and developing economies, as part of the Post-2015 global education agenda.

However, a more in-depth analysis reveals that the actual capacity to use the rich information gathered from all these sources is limited in Zambia, due to a lack of technical skills to make a diagnostic use of assessment data as well as to the relatively

non-existent public discourse concerning such use (OECD, 2014: 16). Therefore, there is an urgent need in Zambia for the coordination and harmonization of all MALA structures, programmes, projects, and activities under a common MALA umbrella. It is important to note that this theme was consistently emphasized by all MALA stakeholders and beneficiaries during UNESCO's fact-finding mission to Zambia in June 2015. This important MALA initiative can only succeed when adequate resources are made available for long-term and sustainable institutional and human capacity development, and harmonized to avoid duplication and wastage. It should reach out all major MALA stakeholders and beneficiaries in a mutually reinforcing, inclusive, and enduring manner.

Policy issue 1: Absence of a formative orientation of the current MALA system

The MALA system in Zambia has a longstanding tradition and, despite some drawbacks, is highly regarded by most stakeholders in education. Yet, it is entirely focused on summative assessments that have important implications for students' careers and lacks the necessary focus on the formative evaluations that may contribute more to raising the quality of the learning experience, particularly of those who are lagging behind.

Evidence

Public examinations feature highly within formal assessment in Zambian schools, just as they do in most African countries. Assessment is not only a key factor in the transition to further education and work; it can also be a major influence in education decision-making by individuals, their families, and employers. Each level of school education in Zambia is marked by a central public examination. Examinations are high-stakes, as elsewhere, since their outcomes determine which students are selected to the next level of education. Parents use them to select the schools in which to enrol their children, while employers use them to identify who to employ.

ECZ annually administers the following examinations to students in public, private, grant-aided, and community schools:

- The Grade 7 Composite Examination which certifies completion of primary education and is a requirement for pursuing lower-secondary education;
- The Junior Secondary School Leaving Examination (JSSLE) for Grade 9 which certifies the completion of lower secondary general programmes and is required for joining upper secondary education; and

- The Grade 12 General Certificate of Education (GCE), which is an entrance examination for tertiary institutions, such as colleges and universities.

The nature of high-stakes examinations in grades 7, 9, and 12 means that those students who do not transition to the next grade leave the formal education system without qualifications. Although some may repeat those grades hoping to qualify, ultimately very few get selected to progress to university education. The JSSLE and the GCE in Zambia are regarded as important transition junctures between school and work, and school and tertiary education. These are high-stakes issues and represent persuasive motives to administer these examinations as such. Therefore, policymakers need to guarantee that the instruments designed test for what students are expected to learn.

All education stakeholder groups in Zambia accept that details of what is measured by examinations, information on how they are prepared, and reports on the performance of past candidates are available to most students. Nevertheless, examination malpractice is rampant and has included, for instance, leaked content and copying from other examinees. A full section about such malpractice appears in the latest ECZ report (2014: 27–32). ECZ has established some mechanisms to monitor malpractice, and funding is provided for independent research on the effects of examinations (World Bank, 2009). Despite this, the outcomes of these examinations are considered credible, and are used to advance to higher levels of education and for employment.

Watering down the prominence of high-stakes assessment should assist in reducing the pervasive incentives and distorting behaviours in schools and by teachers. Nonetheless, it may not be sufficient, in itself, to address tendency of teachers to 'teach to the test' and schools to channel their resources to those students with higher capabilities, at the expense of those who require more support. It is perhaps not helpful to categorize these disruptive behaviours in terms of poor schools and teacher accountability, since it implies putting the blame on schools and teachers; these behaviours could be seen as a rational response to poor policy signals intrinsic in the current system of reward (UNESCO, 2012a).

MoGE has established guidelines for conducting school-based assessment in the teaching and learning process. Assessments are now required every 5th, 10th and 13th week, respectively (Education for All 2015 National Review Report: Zambia). However, classroom assessment practices are still very weak. For instance, teachers do not have a standardized grading format and do not explain clearly to parents how their children have performed. Nevertheless, it is a requirement. Evidence from a continuous assessment initiative pilot highlighted many implementation challenges.

For example, large class sizes have increased the workload of teachers, who are not able to practice continuous assessment, and instead engage in continuous testing at the end of the month. Many are also not able to conduct assessments on an ongoing basis, including weekly, fortnightly, or following a topic. Although the teachers participating in the project had been provided with booklets with guidelines which required that they meet other teachers, this was not possible for various reasons. Furthermore, classroom assessment activities are not linked with pedagogical or curricular framework, and also tend to focus on control and administrative tasks (World Bank, 2009).

Discussion

The World Bank's System Assessment and Benchmarking for Results (SABER) for student assessment systems (see Clarke, 2012) posits that high-stakes examinations can have a backwash effect on the education system and impact positively, or negatively, on the knowledge and skills of graduates. Such examinations are generally designed to test understanding of specific subjects for progression to the next grade, rather than testing transversal competencies such as critical thinking and creativity. It is noted that they involve rote learning for preparation, instead of deeper learning. These concerns must be considered in the application of such tests, to determine whether they should be combined with other information sources.

High-stakes examinations are generally considered as gateways to further education. The Grade 7 Composite Examination and JSSLE are used to select top-performing students who might otherwise not have the opportunity to go to privileged schools. This is not the only way of widening access to education, however. Efforts to democratize education have increased access and have created more pathways to further education. Gambia, for instance, abolished examinations at the end of the primary cycle in 2002 and, as a result, increased enrolment in lower secondary education, from 44 per cent in 2002 to 57 per cent in 2003, and 63 per cent in 2004. The same approach could be implemented in Zambia (UNESCO, 2012b).

There is need for an alternative to the current system of reward which sends the message that the priority of policy is to improve the results of high-performing schools and students, rather than raising those of the less privileged. For illustration, if the examinations are used as a diagnostic to recognize and channel more support to the schools with greatest difficulties, or to reward tangible improvements where there was previously poor performance, it would indicate that the policy priority is meant to lift the performance of those left behind. Such a scenario would introduce diverse incentives and promote a different set of behaviours among teachers and schools. The USA and some parts of Australia have implemented such measures.

Good configuration between the structure of rewards and the anticipated practices within school and among teachers is fundamental.

RECOMMENDATIONS

- Establish a comprehensive MALA framework and built-in system to complement the current summative assessment model with a formative one.
- Promote formative assessment at school level by offering in-service training to teachers and school leaders, as well as toolkits with a wide variety of examples.
- Improve the capacity of individuals tasked with administering examinations, developing tests, and analysing examination results to understand the value of formative assessments by offering them regular and sustainable capacity-building programmes.

Policy issue 2: Lack of use of MALA data to inform policy-making

Despite the fact that Zambia is one of the few sub-Saharan countries to have a comprehensive MALA system, the actual use of the resulting data for better informed policy-making by the government is rather low. This may be the result of a lack of capacity to produce timely reports highlighting key messages that can prompt action, or of a lack of evidence-based political culture among policy-makers, or a combination of both.

Evidence

As already said, Zambia has a well-established MALA system which has both national and international components. The National Assessment Survey (NAS) has, for instance, been undertaken seven times (between 1999 and 2014) to measure the learning achievement in literacy, numeracy, and life skills of pupils in Grade 5. Zambia has also participated in international large-scale assessment (ILSA), including SACMEQ and, more recently, PISA for Development. The SACMEQ surveys of 1995, 2000, and 2005 tested the abilities in mathematics and reading English of Grade 6 children in formal school.

Yet, despite such important initiatives, much is still to be done to ensure a better use of the MALA results. For instance, Zambia also participated in the Early Grade Reading Assessment (EGRA), which was a measurement instrument for early-grade reading proficiency, administered by USAID (2009–2010). The results had major policy implications and a policy dialogue between USAID and Zambian government officials was arranged in 2011. Despite these efforts, the abysmally weak outcomes made stakeholders reluctant to disseminate the draft assessment report publicly. It

took a new government to deal with the reality of the EGRA results dissemination and, once the conversation was joined by citizens and action groups, the government and USAID developed another dissemination strategy to broaden the discourse (Nielsen, 2014).

In 2014, Zambia became the first sub-Saharan African nation to agree to participate in the international survey pilot of PISA for Development. The process is expected to provide an all-inclusive appraisal of the quality and equity of Zambia's education system, with a view to strengthening the effective use and dissemination of PISA assessment results, for policy debates and implementation strategies and actions. This initiative is linked with an improved system of educational assessment in Zambia, as should be the case in emerging and developing economies. It is argued that PISA for Development in Zambia will address exactly such an important need.

It is often argued that these different surveys operate on their own with their specific mandates, methodology, and expected outcomes. They can be donor driven and/or donor funded. Sustainability in terms of resources (human and fiscal) and ownership in terms of institutionalization possibilities and capacity enhancement are lacking. For example, SACMEQ results are not adequately used for informed policymaking and implementation beyond the central ministry level. The feedback that schools and educators need from the results is not always available. As the SABER Country Report (2009) confirmed, there is a total absence of educational policy decisions based on the results of SACMEQ to bring about any positive impact on students' achievements. Furthermore, the report insisted that results from assessments are rarely used by teachers, either for their teaching or for improving the performances and results of their students.

Similarly, an OECD report concludes that: 'The research staff at the ECZ has had training in the use of modern psychometrics, including classical item and test analysis … However, due to unfamiliarity of other stakeholders with these method, they have not yet been employed in the production of reported results of any assessments.' (OECD, 2014: 17).

There is little evidence of top-ranking decision-makers being aware of why assessment data do not influence improvements in learning. However, field experience indicates that, in a few provinces, provincial leadership has regularly checked on performance (MESVTEE, 2014). A consistent connection with stakeholders beyond the MoE can offer local solutions which are cost effective (USAID, 2014).

However, for both surveys and examinations, there is no mechanism in place for the effective use of the results for informed policymaking and recommendations.

Evidence from the consultations and discussions conducted during the June 2015 UNESCO fact-finding mission confirms that too much emphasis is given to high-stakes examinations in the country, without adequate efforts and resources for further capacity building of the critical mass of human resources involved in such examinations, namely in measurement, test developments, and analyses, and the broad-based dissemination of examination results. It was reported during the meeting with ECZ staff that the very rich and valuable annual ECZ examination reports cannot be printed and disseminated because of lack of resources, although they are intended for major stakeholders, users, and beneficiaries at central, regional, district, and local levels.

Discussion

The outcomes of national assessments and surveys (national, regional, and international) can be used to establish benchmarks for appraising learning achievements (Lesotho) and provision of baseline data on the availability of learning materials in schools (Vietnam), to mention just a few. Regional African surveys, such as SACMEQ, allow senior policy makers to inform prospective decisions on baseline data and select issues which might be further investigated in research studies. It also supports the involvement of stakeholders and better transparency in decision-making. For example, in her framework paper for the World Bank in answer to the question, 'What matters most for student assessment systems?', Clarke (2012: 18) concluded that, over and above the three key quality drivers she proposed for assessment – (1) an enabling context; (2) system alignment; and (3) assessment quality – MALA or any other framework has to be supported by efforts to strengthen the quality and utility of data and information produced.

This is critical because the main purpose of any assessment system is to provide valid and timely information to a set of users – the student, the teacher, the community, and the policymaker – so that they can make better decisions in support of improved quality and learning outcomes. Choices about the assessment system should support these users, in relation to their information and decision-making needs. Therefore, country teams must plan from the outset to have a long-term commitment to, and investment in, the policies, inputs, and actions that will be required to transform their assessment system. The pay-off will be an assessment system that can support better decision-making and contribute to higher levels of education quality and learning for all.

There is potential for beneficial relationships among various organizations concerned with education, yet they do not seem to have fully explored their capacities to shape a commonly coordinated and harmonized MALA system. Having partners

beyond the MoE, such as higher education institutions, employers, NGOs, and parent associations, can enable the sharing of successes and failures in the field to help shape the assessment policy and instruments. Additionally, such relationships cultivate institutional trust and enhance reforms, while addressing any reluctance to effectively analyse and use the outcomes of various assessments.

RECOMMENDATIONS

- The main stakeholders concerned with educational planning, teacher training, curriculum development, and quality control should work in tandem with ECZ and other national and international bodies involved in carrying out MALA surveys in Zambia, to make effective and optimal use of MALA results to improve the quality of learning.
- Monitor the impact of NLSA results on policymaking and implementation and provide funding for independent research involving more researchers from higher education institutions, so that these results can be optimally used locally and disseminated nationally and internationally.
- A formal national policy document should be written to systematize the effective use of ILSA results in the education policymaking and policy implementation processes. Steady government funding should be made available for ILSA activities, research, and development.
- Coordinate and harmonize the use, analysis, and dissemination of assessment and survey results to design appropriate policies and actions that are directly concerned with effective learning, teacher training, classroom instruction, and general assessment.
- Use MALA results effectively to create alternative career pathways to increase equality of participation and to improve the results of disadvantaged students, and girls in rural areas, in particular. In this context, hard-to-reach areas, children from disadvantaged socio-economic groups, and children with disabilities and learning difficulties should receive feedback and remedial educational opportunities through the effective and systematic use of assessment results from surveys and examinations. Assessments need to be followed up by other research measures to understand how non-cognitive factors contribute to poor performance.
- MALA results should be provided in an accessible manner to reach major educational stakeholders: the learners, the teachers, the parents, and the front-line implementation agents. Media coverage of the results is indispensable for such a need and purpose.
- Key stakeholders should contemplate the implications of national assessment verdicts. Multiple stakeholders, such as civil society, teachers' unions, teachers, and mass media, need to receive the assessment results and national public awareness

campaigns should be launched before international survey results are reported from a worldwide league of nations' perspective. The results of international assessments should be broadcast first and foremost in national media and be disseminated to national and local key stakeholders and teachers before they reach the international media and international educational community.

Policy issue 3: Inadequate orientation of the current provision of continuous professional development (CPD) programmes for teachers in MALA

While Zambia has invested in a number of important teacher CPD initiatives, these are mostly oriented towards the improvement of teaching and learning, with a focus on curriculum content for examination and certification purposes, little attempt is made to use CPD programmes to enable teachers to make a proper use of MALA data and results in order to improve learners' performance.

Evidence

CPD for teachers is necessary to achieve sustainable quality education. Over the years, in-service training (INSET) systems have supported teacher CPD. If African governments owned, operationalized, and sustained INSET, then effective teacher professional development could result in sustainable quality teaching and learning. However, a study has documented that this is not the case for Kenya, Malawi, and Zambia, which have non-sustainable CPD and INSET systems (Banda, 2014).

The Standards and Evaluation Guidelines (MESVTEE, 2015) stipulate that within the current decentralized education system, schools and centres/units have responsibility for planning and managing programmes and projects involving human resource development, such as CPD and related activities. It is necessary to monitor and evaluate on a continuous basis the operations and sustainability of CPD for teachers in Zambia. It should involve standards officers in all phases of activity. Besides monitoring, they can offer advice to stakeholders on the programme, help schools in managing CPD, produce monitoring reports for CPD, etc. There are numerous types of monitoring activity for SBCPD activities. CIPP (context, input, process, products), for example, allows those charged with implementation to decide on how the programme is to be implemented. This programme is flexible enough to generate suggestions on how to effectively implement SBCPD.

A 2013 study exploring the impact of strengthened teacher CPD programmes on pupils' performance at Grade 12 in selected secondary schools in Solwezi District

found that the institutionalization of SBCPD activities in secondary schools was important not only in improving pupils' performance but also in enhancing the skills and competencies of teachers. Depending on their job description, the interviewees mentioned their involvement in diverse types of CPD programmes. For instance, most of the senior education standards officers, head teachers, heads of department, and teachers indicated that first and second degree courses (such as the fast-track degree programme for science and mathematics education) helped them to attain higher professional qualifications. The principal education standards officer (teacher education department and provincial resource centre co-ordinator) stated that: "As a provincial resource centre, we have a timetable in which we go round all the secondary schools to sensitize teachers on how CPD programmes are supposed to be conducted. At certain times, we even conduct demonstrations on any latest professional skills that need to be communicated to the teachers, for their own benefit and that of the learners." (Ngumbwe, 2013: 50). Students in the focus group discussions were aware of their teachers' professional upgrading involvement at various universities, attendance at subject association conferences, and departmental/school teacher group CPD meetings. Some of them had also participated in their teachers' presentations of lesson study cycles.

The above-mentioned research on CPD activities found that the performance of Grade 12 learners at participating secondary schools in Solwezi District improved remarkably, while CPD activities such as upgrading of qualifications enhanced the competencies and skills of participants in the delivery, demonstration, and presentation of lessons. It was, however, observed that, although the performance for Grade 12 students improved at district and provincial levels, this was not reflected in overall outcomes at national level. The Solwezi District CPD programme was also part of the MoGE/JICA initiative.

Despite these positive inputs, in Zambia, as in most African countries, there is a continuity gap following the completion of projects. Likewise, all these innovative and important CPD initiatives still focus on the improvement of teaching and the teaching/learning processes, with an emphasis on curriculum content and teaching, for examination and certification purposes. Little attempt is made to use CPD programmes to enable teachers to genuinely examine MALA data and results in order to improve learners' performance.

Discussion

Lifelong learning for teachers has long been held up as a critical means of ensuring that an education system can meet the various challenges of education policy reform, changing priorities, and innovation. Evidence from around the world reminds

teachers of the challenges they face and the need for continuous professional development (CPD). In the Middle East, for example, important efforts are made to promote CPD in university faculties of education in order to meet such challenges. A European Union CPD programme for teachers has been launched in the region to develop and further strengthen teachers' capacities in action research and student teaching. However, in Zambia as in most countries of the world, CPD programmes for MALA are non-existent as teachers are expected 'to teach for the test' and nothing else. Both pre-service and in-service programmes are designed for such a purpose. The teaching profession is often regarded as the most traditional and conservative profession.

Over the years, a number of teacher professional growth initiatives in Zambia have been government-driven and donor-funded. For instance, the Japanese International Cooperation Agency (JICA) and MoGE implemented a project called the Strengthening of Mathematics, Science and Technology Education (SMASTE) School-based CPD through Lesson Study in Zambia, which began in 2005. The document, School Program of In-service Training for the Term (SPRINT) Program in Zambia (Japan Education Forum IX), listed some CPD activities which were conducted during the project. Interestingly, the project was implemented during a period when Japan's approach towards donor aid was for '…African ownership in development and of partnership with the international community as seen in the New Partnership for Africa's Development (NEPAD) of 2000' (Mubanga, 2012: 7).

School-based continuing professional development (SBCPD) has been conducted in Zambia by MoGE as an effective means to enhance educational quality. It is designed for self-development, as well as for group and institutional development. The idea is to improve teaching and learning through activities in classroom using lesson study. SBCPD has been incorporated into basic schools and high schools, including colleges of education. It also forms part of the school and college curricula. The Zambia Education Curriculum Framework 2013 has been developed to provide guidelines and structure throughout the education system (from early childhood to tertiary and adult literacy) for alternative career pathways. For instance, junior secondary schools (Grade 8 and Grade 9) currently offer both an academic and technical career pathway. Senior secondary schools (Grade 10 and Grade 12) also provide technical pathways. The overall aim of the framework is to equip Zambians with skills, knowledge, and values to contribute meaningfully to the development of society and the economy (MESVTEE, 2013).

Guidelines for implementing the school-based programmes have been developed by the MoE, and a range of stakeholders have been acknowledged for successfully implementing the CPD programmes at national level by providing policy pathways

to schools and colleges which manage the implementation. The MoE has recognized the helpful role of teachers' resource centres as learning stations (Mazala, 2011).

From 2008 to 2013, The Flemish Association for Development Cooperation and Technical Assistance (VVOB), in collaboration with the MoGE, implemented the Teacher Training Support Programme which focused on three themes: CPD, distance education, and ICT in education for all teacher training colleges. Towards the end of the programme, VVOB and partners requested all the individuals who had participated in the programme to write their perspectives of the programme activities. The results were published in a booklet entitled Stories of change. The CPD advisor for VVOB Zambia mentioned that before the VVOB intervention, CPD was neither structured nor appreciated, and its activities were not linked with the existing or future roles of people within the college. The programmes therefore failed to meet their goals. A key outcome of the programme has been the institutionalization of CPD in colleges through the creation of the national CPD task team, which comprises lecturers in all colleges; the design of national and college level guidelines for CPD; the founding of CPD committees at colleges; and the scheduling of CPD activities at colleges and departments of colleges (VVOB, 2013).

RECOMMENDATIONS

- Institutionalize CPD programmes for teachers to effectively implement MALA at national, regional, district, and school levels, following the establishment of a legal framework for its application.
- Increase internal capacity (through further training of human resources) at the MoE with a view to bolstering classroom and school-based assessment. Teachers need training too in all MALA programmes, projects, and activities. Increase monitoring by school officials at district level.
- Increase the possibilities for teachers, especially those in the rural areas, to actively participate in the improvement of MALA through different capacity-building programmes. This is to strengthen and sustain their knowledge, skills and competencies in this field and to ensure effective implementation at school and classroom levels on a continuous basis.
- Promote CPD through workshops, seminars, educational fora, and university-based certificates, diplomas, and degrees in assessment. ICT and other media outlets should be used to disseminate CPD activities. This can widen access to knowledge-sharing. Strengthen in particular locally-driven CPD activities for teachers and mobilize more funds for allocation to CPD activities at schools and resource centres.
- Develop and sustain capacity-building programmes for head teachers in CPD activities to improve their knowledge of MALA programmes, projects, and

activities. School leadership should be involved in CPD activities to promote teacher practice in knowledge and skills acquisition so as to improve student performance.

Policy issue 4: Lack of a comprehensive M&E system.

The practice of one-shot teaching and learning to the test is sustained by the lack of M&E system to systematically monitor and produce feedback from all assessment systems for teachers, learners, examiners, curriculum and textbook developers, and school leaders.

Evidence

Assessment practices in the country are usually summative and do not provide immediate feedback on the teaching and learning process (formative assessment). In the absence of a M&E system for MALA with capacity-building implementation modalities for major education stakeholders and a database consisting of assessment, benchmarks, and performance indicators, the practice of one-shot teaching and learning to the test will prevail and continue to undermine the quality of education in Zambia.

In Zambia, assessment for quality assurance is regarded as a key pillar of the Post-2015 agenda. In its document, Education for All 2015 National Review Report: Zambia, MoGE acknowledges that, over the past decade, policy initiatives such as free primary education (FPE) and early childhood education (ECE) have successfully increased participation rates. However, quality initiatives to improve teacher competence, for example, have failed. Furthermore, insufficient funding for FPE has compromised the quality of service delivery. The document maintains that: "Zambia has generally done well in carrying out summative assessments but needs to build an early warning system to gather achievement data continuously throughout the learning cycle in an aggregative manner so that policy actions derive from information based on real-time practice." (MESVTEE, 2014: 35)

The 2014 Joint Annual Review (JAR) policy brief, which reported on the assessment situation in Zambia, postulates that before embarking on an assessment, attention should be given to the environment within which learning is nurtured. It suggests that stakeholders need to collaborate in achieving the goals of assessment, no matter how varied they are. "Crucially, strengthening the ability to collect and apply everyday data is bound to improve the quality of monitoring the performance of the system. Improving everyday assessment practices will also increase the chances of achieving better results at the end of learning cycles. In all, the notion of evidence

based decision making in the education sector must derive evidentiary from a robust process of collecting and analyzing assessment data." (Chipoma, 2014: 35–36).

It is therefore imperative that measurable monitoring indicators of quality and learner-centered pedagogy focus on learning processes and outcomes, and not only on inputs. Multiple quality indicators are necessary for both formal and non-formal education programmes since they are required to account for the health, civic and environmental awareness, and social and communication skills of students.

Discussion

The World Bank document, Making Monitoring and Evaluation Systems Work: A Capacity Development Toolkit, emphasized the growing global demand from government, citizens, civil society, the international community, NGOs, donors, and so on, for improved performance in terms of good governance, accountability and transparency, effective development, and delivery of credible outcomes, among other things. "As demands for greater accountability and results have grown, there is an accompanying need for useful and useable results-based monitoring and evaluation systems to support the management of policies, programmes, and projects. Monitoring and Evaluation (M&E) is a powerful public management tool that can be used to improve the way governments and organizations achieve results. Just as governments need financial, human resource, and accountability systems, they also need good performance feedback systems." (Gorgens and Kusek, 2009: 1)

A credible M&E system acts as an extra management tool providing decision-makers with feedback on performance so as to support future improvements.

RECOMMENDATIONS

- Strengthen the country-specific monitoring and evaluation (M&E) system for MALA in close cooperation with all major stakeholders at ministry, departmental, regional, district, and school levels.
- Explore and analyse good and cost-effective M&E practices for MALA, regionally and internationally, with a view to institutionalizing and strengthening the Zambian MALA system with relevant M&E performance indicators as related to inputs, processes, outputs, outcomes, and impacts.
- Further develop and strengthen the MALA M&E system with democratic structures and institutions, participatory governance, and the empowerment of civil society organizations, local educational managers, planners, and administrators to ensure broad-based commitment to quality education.

The four policy issues identified and discussed in this section all point to the importance of revisiting Zambia's existing system for assessment and monitoring learning achievement. Analysis of its strengths and weaknesses indicates the importance of having a comprehensive MALA framework where all types and forms of assessment and monitoring of learning achievement are harmonized in a built-in system. The way forward for Zambian authorities, education stakeholders, and partners in this field should involve the development of an MALA framework with a built-in comprehensive and complementary system for both summative and formative assessment, capacity development of human resources for assessment through broad-based CPD programmes, the effective use and dissemination of data and results for informed policymaking and implementation, and the setting up of an M&E system for MALA. From this perspective, Chipoma (2014: 7) provides this key policy recommendation to MoGE which can pave the way for the development of an effective MALA system in Zambia in the years to come: "MoGE takes immediate action to develop a comprehensive policy on assessment that clearly states a vision, ethos, and guidelines for implementation. This policy must cement the ambitions of the new national curriculum as well as challenge stakeholders, including the private sector (for vocational training), to do more to innovate, balance investments between assessments of and for learning, and ensure that all aspects of practice are progressing in tandem."

References

Banda, B. 2014. *Continuing professional development through sustainable in-service teacher training system in Kenya, Malawi And Zambia*. Retrieved from: https://opus4.kobv.de/opus4-tuberlin/files/5125/10_banda_5125.pdf.

Chanda, M. M. 2014. 'An overview of 2013 examinations results'. *Times of Zambia*. Retrieved from: http://www.times.co.zm/?p=9921.

Chinapah, V. 2013). 'Education of quality for all: Myth or reality?' In J. MacBeath and M. Younger (Eds.), *A common wealth of learning: Millennium Development Goals revisited* (pp. 180–191). Routledge.

Chinapah, V. 1997. *Handbook on monitoring learning achievement: Towards capacity building*. Paris: UNESCO.

Chinapah, V.; Miron, G. 1990. *Evaluating educational programmes and projects: Holistic and practical considerations.* Socio-economic Studies, 15. Paris: UNESCO.

Chinapah, V.; H'ddigui, E. M.; Kanjee, A.; Falayajo, W.; Fomba, C.O.; Hamissou, O.; Rafalimanana, A.; Byamugisha, A. 2000. *With Africa for Africa: Towards Education for All*. HSRC, Pretoria and UNESCO, Paris.

Chinapah, V.; Kanjee, A.; Fredriksson, U.; Claessen, N. C.; Sayed, Y; Cars M. 2010. 'Improving quality of education'. Research proposal submitted to the Swedish Research Council, Stockholm, Sweden.

Chipoma, C. 2014. *The situation of assessment in Zambia: 2014 Joint Annual Review (JAR) policy brief.* Lusaka: MESVTEE.

Clarke, M. 2012. *What matters most for student assessment systems: A framework paper*. Washington, DC.: International Bank for Reconstruction and Development/World Bank.

ECZ (Examinations Council of Zambia). 2014. *2014 examinations performance review.* Lusaka: Examinations Council of Zambia.

Greaney, V.; Kellaghan, T. (Eds.). 2008. *Assessing national achievement levels in education* (Vol. 1). Washington D.C: World Bank Publications.

MacBeath, J.; Younger, M. (Eds.). 2013. *A common wealth of learning: Millennium Development Goals revisited*. Routledge.

Mazala, C. M. 2011. *The effects of continuing professional development (CPD) though SPRINT on teacher classroom practices and student learning outcomes.* Lusaka: The University of Zambia.

MESVTEE (Ministry of Education, Science, Vocational Training, and Early Education). 2013. *Zambia education curriculum framework 2013.* Lusaka: Zambia.

MESVTEE. 2014. *Education for All 2015 national review.* Lusaka: Zambia.

MESVTEE. 2015. *Standards and evaluations guidelines.* Lusaka: Zambia.

Mubanga, R. M. 2012. *School Program of In-service Training for the Term (SPRINT) program in Zambia.* Japan Education Forum IX.

Ngumbwe, Z. 2013. *The Effects of The Strengthened Teachers' Continuing Professional Development (CPD) Programmes on Pupil Performance at Grade Twelve Level in Selected Secondary Schools of Solwezi District.* Lusaka: The University of Zambia.

Nielsen, D. 2014. *EdData II.* Measurement and research support to education strategy goal 1. Early grade reading and math assessments in 10 countries: Dissemination and utilization of results. A review. United States Agency for International Development (USAID). RTI.

OECD (Organisation for Economic Co-operation and Development). 2014. *PISA for Development: Capacity needs analysis report: Zambia.* Paris: OECD.

UNESCO. 2005. *EFA global monitoring report 2005. Education for All. The quality imperative.* Paris: UNESCO.

UNESCO. 2012*a*. *Malaysia education review: Final report*. May 2012. Paris: UNESCO.

UNESCO. 2012*b*. *EFA global monitoring report 2012: Youth and skills – Putting education to work.* Paris: UNESCO.

VVOB (Flemish Association for Development Cooperation and Technical Assistance). 2013. *Success stories of six years teacher training Support in Zambia*. Retrieved from: http://www.vvob.be/vvob/en/news/succes-stories-six-years-teacher-training-support-zambia.

VVOB; MESVTEE. 2013. *MESVTEE and VVOB Teacher Training Support Programme 2008–2013. Our stories of change*. Retrieved from: http://www.vvob.be/vvob/files/2013_publication_zambia_-_stories_of_change_ttsp.pdf.

World Bank. 2009. *SABER student assessment country report: Zambia 2009*. Systems Approach for Better Education Results (SABER) Country Report. Washington DC: World Bank.

Conclusion

A favourable macroeconomic and socio-political environment has allowed Zambia to demonstrate remarkable commitment to improving its national education system, particularly following the 2000 Dakar Education for All conference. This is evidenced in stable funding for education, which averaged 17 per cent of total government expenditure (equating an average of 4.1 per cent of GDP) between 2009 and 2013. After experiencing serious educational challenges in the 1980s and 1990s, Zambia has undertaken serious structural reform of its education sector, resulting in marked improvements in most key educational indicators at all levels.

More than a decade of concerted action has delivered significant improvements in access to and participation in basic education. The country has also been pursuing national and international goals with measures concerning quality and the right to education. As a consequence, Zambia has achieved notable progress: in primary education is almost reached, gender parity in this level is achieved, nearly nine out of 10 children completing primary education achieve their transition into lower secondary education, and the completion rate for lower secondary (62.4 per cent in 2011), places the country among the high performers in sub-Saharan Africa. Consistent with Zambia's new status as a middle-income country, the current national strategic focus on education is gradually shifting towards the development of upper secondary and higher education, in line with both Zambia's Vision 2030 and the internationally agreed Education 2030 agenda.

Despite these accomplishments, Zambia is, nevertheless, not performing as well as it could, with education quality falling short of national and international standards, while significant inequities remain. The shortfalls are of particular concern as the country's population is mostly composed of young people: 46.2 per cent of the Zambian population are under 15 years old. In fact, Zambia's results in international tests are below those of many neighbouring countries, with far too many young people scoring at the very lowest levels, far too few excelling, and far too large a gap between the results of the most privileged youth and those from more modest backgrounds, especially those in rural areas. This paints a grim picture of the quality of education as well as of its relevance and equity. Some of the root causes for these shortfalls are analysed through the lens of the five major policy domains of this review.

This review has focused on five national priority domains where Zambia is willing to take action to better ensure that its students acquire the skills, knowledge, and values they need for their personal fulfilment as well as for the realization of the country's

social and economic development, particularly in the context of its Vision 2030. While actions in these areas would go a long way to improving the outcomes of the country's education system, this review necessarily leaves room for other measures that Zambia might need to take in pursuit of the same purpose. The main lessons of each chapter, and the conclusions that flow from these, are outlined below.

System-wide policy and planning

Zambia's strong commitment to alleviating poverty, achieving sustained economic growth, and creating employment through strategic planning, as the cornerstones of educational development, is clear. Its dedication to ensuring that international trends (such as the MDGs, the EFA goals, and, currently, the SDGs) are reflected in educational planning has also been demonstrated. However, despite these strengths, the review revealed some weaknesses with regard to planning and management of education. These include, first, weak budgetary performance, due to late, erratic, and inadequate sector funding. Second, the distribution of funds between sub-sectors has proven to be inefficient and unconducive to the achievement of strategic objectives, such as the reduction of inequity by promoting pro-poor policies, and the development of skills training and human capital to drive economic and social development (TEVET and higher education). Third, it was found that weak policy implementation compromises the effective and efficient use of limited public resources. This refers particularly to the ineffective implementation of the decentralization policy for general education, as well as to poor human resource management and the inefficient bursary scheme in higher education. Fourth, linked to the above, is the weak national capacity for education planning and management, which affects policy implementation at all governance levels (central, district, and local).

To address these issues, the review team suggests that the Ministry should develop and implement a comprehensive sector capacity development programme, based on an exhaustive needs assessment. Particular attention should be devoted to identify and eliminate impediments to the implementation of the decentralization policy, and to create conditions for its success. The Government has to pursue its efforts to increase funding for education (especially for pre-primary, TEVET and higher education) and define an optimal intra-sectoral allocation, while further reinforcing accountability mechanisms for effective and efficient use of limited resources.

Teacher policies and development

A general shortage of qualified teachers has been observed, due to a failure to recruit, train, and retain a sufficient number of academically qualified candidates for teaching positions. The effects of this shortage of qualified teachers are particularly strong when

it comes to education quality. Thus, the review team recommended that teachers' qualifications, and the quality of professional development programmes, should be revised. It was also suggested that the capacity of teacher training institutions should be improved, and that greater investment is thus required to improve facilities and provide relevant resources for all teacher training institutions. The development and effective implementation of the new curriculum for TTI should also be prioritized. In this regard, an academic staff development unit could be created, either centrally, or locally in all training colleges. Issues related to teachers' remuneration, career opportunities, status, morale, and professionalism were also identified as important factors affecting education quality. In order to deal with these issues, the team suggested revisiting existing salary scales and structures of incentives so as to encourage and facilitate improvements in the status and conditions of teachers and teacher educators and to re-invigorate the teaching profession. Prioritizing the effective functioning of the Teaching Council of Zambia is also an essential means of addressing these points. The team recommended an increased use of information and communications technology, relevant to local contexts, which could be implemented in schools and in teachers training centres.

TEVET

Analysis of the TEVET sector demonstrated that even though there is a strong will and evidence that TEVET could satisfy the needs of the labour market, address socio-economic concerns, and exploit resource-based opportunities, many challenges still remain with regard to skills development in Zambia, in terms of access, responsiveness to labour market, qualification of trainers, and quality of training. Therefore, the review recommends some strategic means of increasing the access to and attractiveness of TEVET programmes, including: expanding available TEVET opportunities, identifying a number of training centres in rural areas so that training facilities come to the learners and not the other way around, and rebranding TEVET so that it is perceived more positively. To deliver this, the Government must increase funding for TEVET to at least between 3 to 4 per cent of its education budget, which is the SADC average, as severe underfunding has been noted in this domain. Stronger partnerships with non-public stakeholders and industry would be an interesting solution to bring on board more private investors. In the process, industry, TEVET providers, and TEVETA should collaborate to develop a more relevant curriculum and to make TEVET more responsive to labour market demands. In fact, a relevant TEVET curriculum is a vital requirement that was raised by different stakeholders throughout the review process. Therefore, in order to ensure that TEVET plays its role as a driver of economic and income growth, as the Government intends, the country must ensure that the design and delivery of the curriculum are led by industry (or conducted with its close collaboration). The review finally found that the quality of

training and trainers could be improved by measures such as revising and reinforcing the quality standards and restoring a decent salary to trainers.

Youth and adult literacy and education

While Zambia's population is predominantly young, it is estimated that 27 per cent of young people and adults (aged 15 years and above) have never been to school or have minimal literacy skills. Despite the Government's efforts to tackle this issue, the evidence shows that the literacy programmes implemented in recent decades were insufficient to address the needs of youth and adults. The main challenges in this area include lack of a policy foundation for YALE, limited and inequitable access to YALE, inadequate funding and weak capacities (institutional, organizational and human). Thus, the review team suggested first of all the elaboration of a comprehensive policy on YALE, as a solid foundation for a long-term development of YALE in Zambia. It is recommended that the new education policy contains enabling provisions concerning YALE, and be framed within a lifelong learning paradigm in tune with the requirements of the SDGs. To expand access to YALE, the Ministry in charge of literacy should convene leading figures in the private sector and leaders of other large corporations in order to encourage them to mount YALE programmes for their staff members and design a plan to reach rural areas and provinces with the lowest literacy rates. As the review pointed out the lack of qualified literacy instructors, focus must also be placed on quality, results, and efficiency by conducting an evaluation of all literacy work and YALE centres and by formulating national standards for YALE professional educators. In the same vein, it is recommended that the Ministry undertakes the restructuring of bodies, such as DODE and ZACODE, to improve the structures and the capacity for YALE.

Monitoring and assessment of learning achievement (MALA)

With a longstanding and highly regarded tradition in the field of MALA, Zambia has set up a large number of MALA structures, programmes, projects, and activities. Despite these achievements, the review pointed out a number of issues, including: (i) the absence of a formative orientation of the current MALA system; (ii) the lack of use of MALA data to inform policy-making; (iii) the inadequate orientation of the current provision of continuous professional development programmes for teachers in MALA, and; (iv) the lack of a comprehensive M&E system. In order to upgrade the country's capacity for assessment, which is already well-developed, initiatives should be taken to engage all major MALA stakeholders and beneficiaries in a mutually reinforcing, inclusive, and enduring manner. Establishing a comprehensive MALA framework and built-in system to complement the current summative assessment model with a formative one would be a first step that could be reinforced with some

other actions for informed policy-making and effective implementation. It is thus recommended that MALA results should be provided in an accessible manner to reach major educational stakeholder (learners, teachers, parents, and front-line implementation agents). The main stakeholders concerned with educational planning, teacher training, curriculum development, and quality control should also work in tandem with ECZ and other national and international bodies involved in carrying out MALA surveys in Zambia to use MALA results effectively and optimally to improve the quality of learning. On the other hand, involving teachers, through CPD programmes, in assessment and monitoring of learning achievements should be considered. This could be done by increasing the possibilities for teachers, especially in the rural areas, to actively participate in the improvement of MALA through different capacity-building programmes. Institutionalizing CPD programmes for teachers to effectively implement MALA at national, regional, district, and school level, following the establishment of a legal framework for its application, would be another important action to take into account.

In support for Zambia's national vision for education in the context of the Education 2030 agenda, this review will hopefully provide important direction as to how the current education policies and strategies can be reinforced or readjusted to help the country to achieve its educational goals and targets.

Conducted in the context of CapED, this review should also be considered as a first step in UNESCO supporting the Government of Zambia as it continues to spearhead policy reforms and provide an exemplary model for capacity development in various national educational priorities for the sub-Saharan African region. To better serve this purpose, the main findings of the review are summarized in the *Tables 38* and *39*, presenting respectively, 'the main policy issues by implications for education system's outcomes, effectiveness and efficiency; and the 'recommendations by expected level of feasibility and impact on outcomes'.

Table 38 Domain issues by implications for education system's outcomes, effectiveness and efficiency

	POLICY ISSUES/DOMAIN	Implications for outcomes			Efficiency	Effectiveness
		Access	Equity	Quality		
1.	**System-wide Policy and Planning**					
1.1	Ineffective implementation of the policy to decentralize education	x	x	x	x	x
1.2	Weak budget performance: late, erratic, and inadequate funding		x	x	x	x
1.3	Inefficient intra-sectoral budget allocation and utilization		x	x	x	x
1.4	Weak national capacities for effective strategic planning and management		x	x	x	x
2.	**Teacher Policies and Development**					
2.1	Low teacher training capacity and inadequate teacher qualifications			x	x	x
2.2	Inadequate continuous professional development programmes			x	x	x
2.3	Inadequate policies for teacher remuneration and career opportunities			x	x	x
2.4	Weak utilization of ICT for implementing CPD programmes			x		
2.5	Lack of facilities and resources and weak capacity and qualifications of staff at TTIs			x	x	x
2.6	Low status, morale, and professionalism of teachers	x		x		x
3.	**Technical, Entrepreneurship and Vocational Education and Training (TEVET)**					
3.1	Limited and inequitable access to TEVET	x	x		x	
3.2	The reservation about the roll-out of the two-tier system				x	x
3.3	Inadequate public funding for TEVET	x	x	x	x	x
3.4	Weak TEVET responsiveness to labour market			x	x	x
3.5	Curriculum not relevant to labour market			x	x	x
3.6	Lack of quality trainers			x	x	x
3.7	Low quality of training			x	x	x
4.	**Youth and Adult Literacy and Education (YALE)**					
4.1	Lack of a comprehensive national YALE policy and weak reflection of lifelong learning perspective in YALE programmes	x	x	x	x	x
4.2	Limited and inequitable access to YALE	x	x			
4.3	Inadequate funding, structures and capacity for YALE	x	x	x		
4.4	Issues related to quality, results, efficiency, and reputation			x	x	x
5.	**Monitoring and Assessment of Learning Achievement (MALA)**					
5.1	Absence of a formative orientation of the current MALA system			x	x	x
5.2	Lack of use of MALA data to inform policy-making			x	x	x
5.3	Inadequate orientation of the current provision of CPD programmes for teachers in MALA			x	x	x
5.4	Lack of a comprehensive M&E system			x	x	x

Recommendations by expected level of feasibility and impact on outcomes

The literature[30] suggests that success in education reforms is determined by a number of factors, including:

(a) A commitment to education and the belief that competencies can be learned and therefore all children can achieve;

(b) Clear ambitious goals that are shared across the system and aligned with high stakes gateways and instructional systems;

(c) Adequate capacity at the point of delivery;

(d) Aligned incentive structures, accountability, and knowledge management;

(e) Investing resources where they can make most of a difference;

(f) A learning system: an outward orientation to keep the system learning, using international benchmarks as the 'eyes' and 'ears' of the system, and anticipating challenges to current success, learning from them, formulating and implementing appropriate responses;

(g) Coherence of policies and practices: alignment of policies across all aspects of the system, coherence over sustained periods of time, and consistency and fidelity of implementation.

The above factors fall into three clusters, referred as: (i) 'Must haves' (a, c, g); (ii) 'Quick wins' (b, e, f), and; (iii) 'Low hanging fruits' (d). Based on the above, the recommendations from each policy domain of the Zambia Education Policy Review are plotted in the matrices below to show their expected level of feasibility and impact on outcomes (*Tables 39.1* to *39.5*). Besides, Table 40 displays the recommendations by estimated level of priority, difficulty, cost and timeframe.

30 Andreas Schleicher. 2015. Strong performers and successful reformers in education. Presentation to IBAEM Conference, 17 October 2014, Rome. Retrieved from: http://www.ibo.org/contentassets/71f2f66b529f48a8a61223070887373a/keynote-andreas-schleicher.pdf

Table 39.1 System-wide Policy and Planning (SWPP)

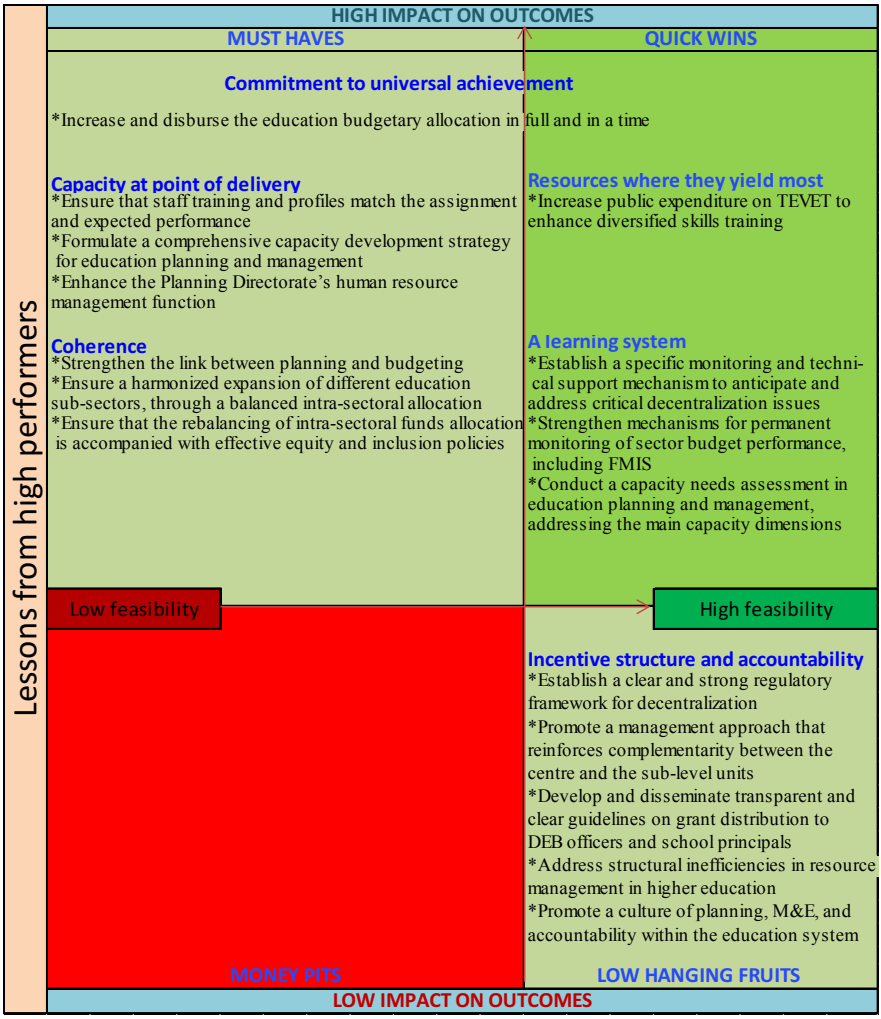


Table 39.2 Teacher Policies and Development

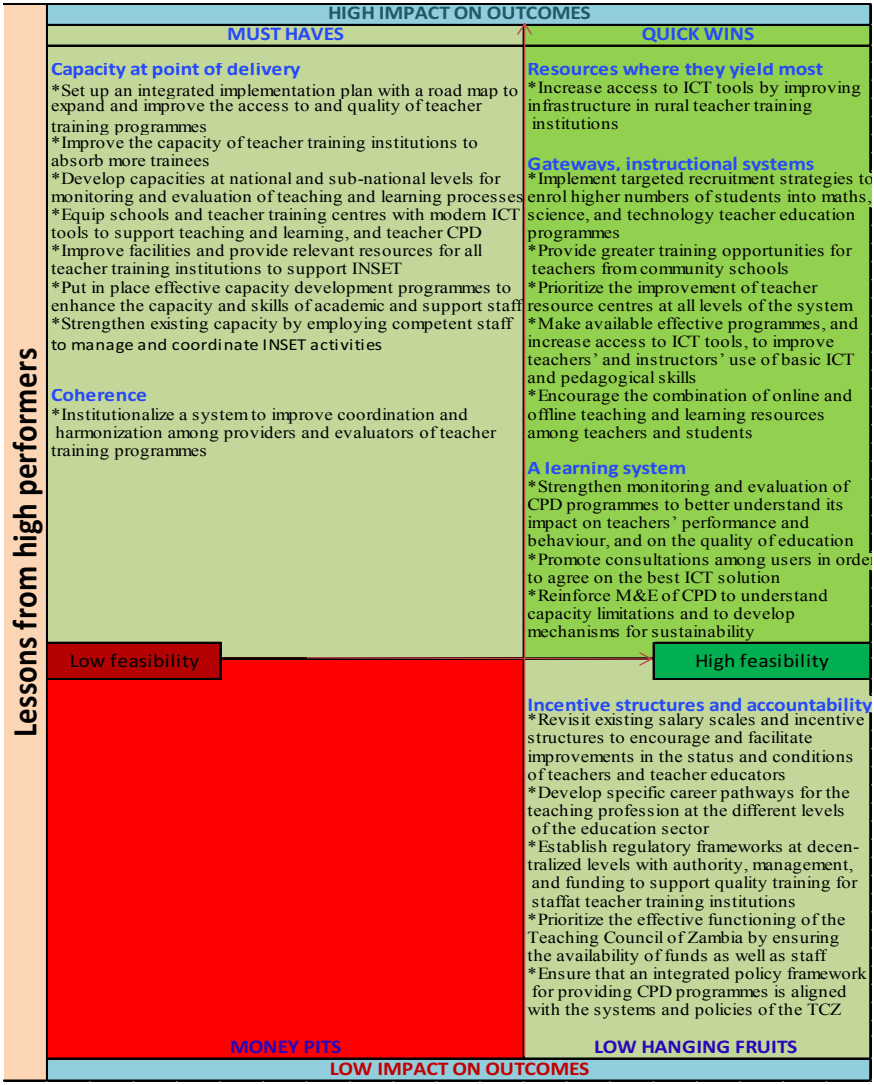


Table 39.3 Technical Education, Vocational and Entrepreneurship Training (TEVET)

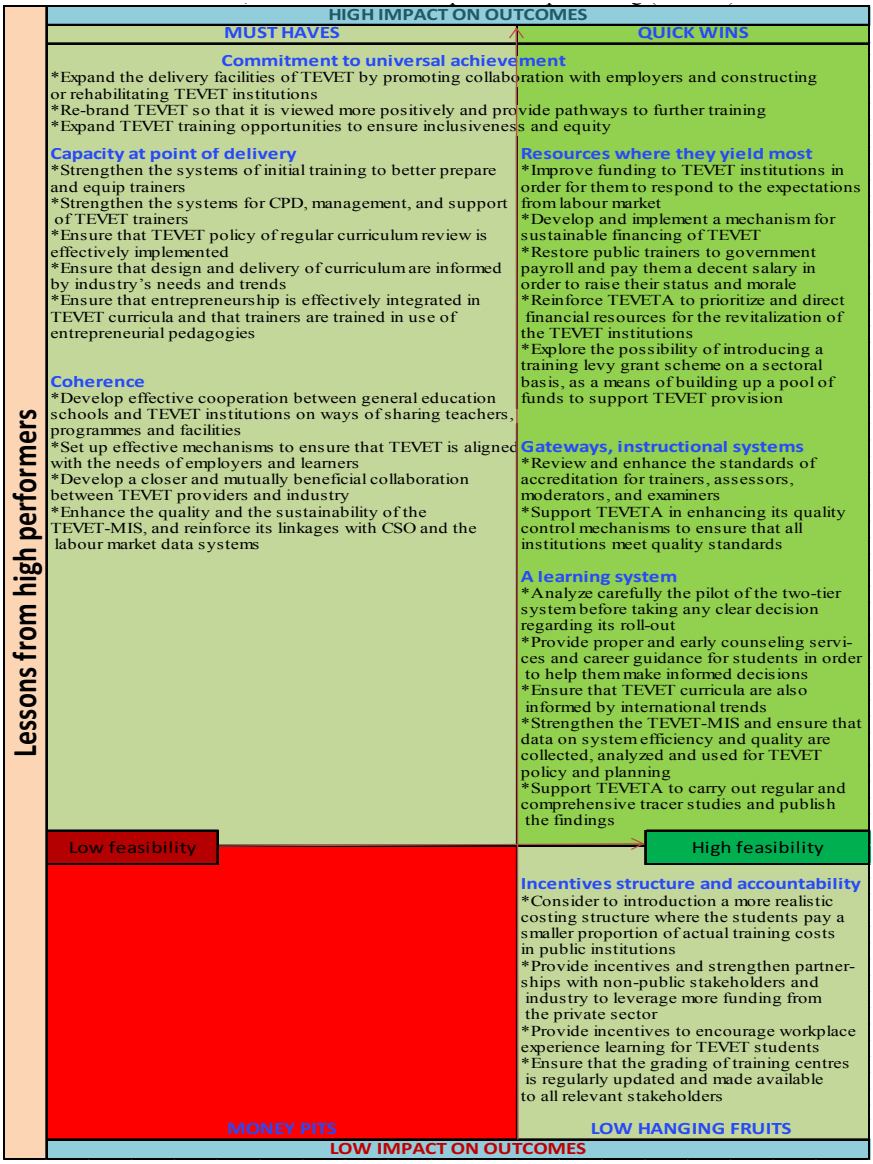


Table 39.4 Youth and Adult Literacy and Education (YALE)

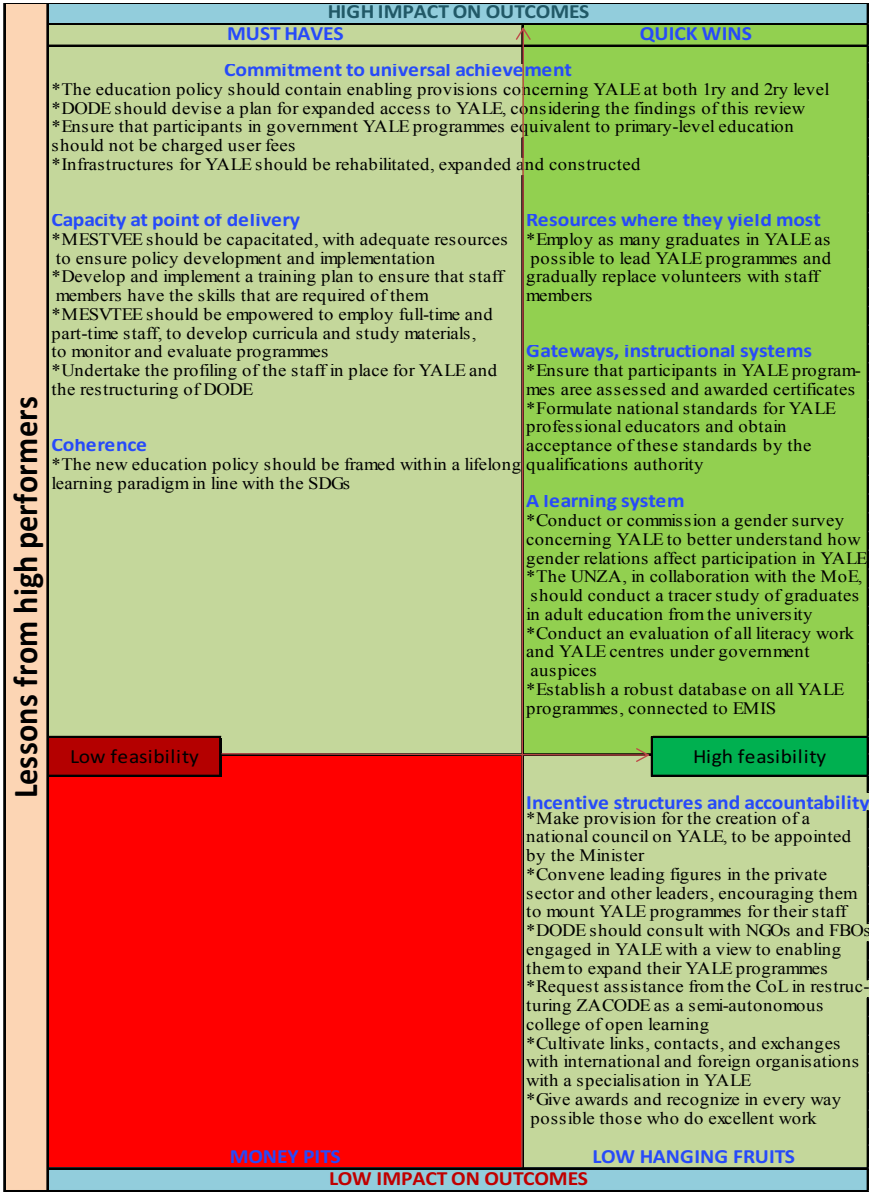


Table 39.5 Monitoring and Assessment of Learning Achievement (MALA)

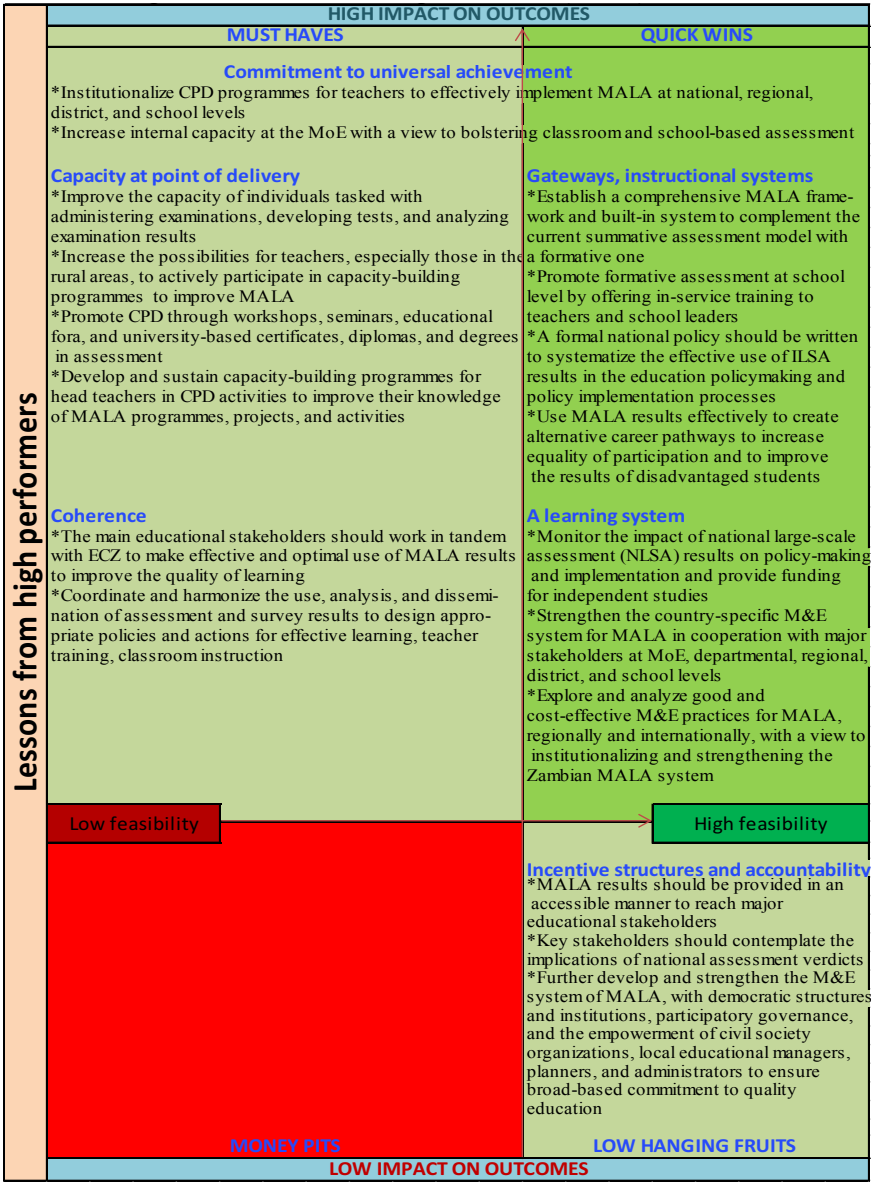


Table 40 Recommendations by estimated level of priority, difficulty, cost and time frame

SYSTEM-WIDE POLICY AND PLANNING		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	Short	Medium	Long
Issue 1.	**Ineffective implementation of the policy to decentralize education**						
1.1	Establish a clear and strong regulatory framework, backed by renewed political commitment and adequate funding to support the implementation of decentralization in education	H	M	M	→	→	
1.2	Ensure that staff training and profiles match the assignment and expected performance	M	M	L	→	→	
1.3	Promote a management approach that reinforces complementarity in roles and authority between the centre and the sub-level units	H	M	L	→	→	
1.4	Develop and disseminate transparent and clear guidelines on grant distribution to DEB officers and school principals	H	L	L	→		
1.5	Establish a specific monitoring and technical support mechanism to anticipate and address critical issues	M	L	L	→		
Issue 2.	**Weak budget performance: late, erratic, and inadequate funding**						
2.1	Increase the budgetary allocation to education and ensure that the Ministry of Finance disburses funds in full and in a timely fashion to MoGE and MoHE	H	M	M	→	→	
2.2	Strengthen the link between planning and budgeting, particularly by enhancing outcome-based budgeting	H	M	L	→	→	
2.3.	Develop and/or strengthen mechanisms for permanent monitoring of sector budget performance	M	M	L	→	→	
2.4.	Address the concerns of development partners, in light of declining aid to education	M	L	L	→		
2.5	Further strengthen and modernize the financial management information system	M	M	L	→	→	
Issue 3.	**Inefficient intra-sectoral budget allocation and utilization**						
3.1	Ensure a harmonized expansion of different education sub-sectors, through a balanced intra-sectoral allocation	M	L	L	→	→	
3.2	Ensure that the rebalancing of intra-sectoral budget allocations is accompanied with effective equity and inclusion policies	H	M	L	→	→	
3.3	Address structural inefficiencies in resource management in higher education	H	M	L	→	→	

SYSTEM-WIDE POLICY AND PLANNING		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	Short	Medium	Long
3.4	Increase public expenditure on TEVET to enhance diversified skills training, needed to sustain economic growth and achieve Zambia's Vision 2030	H	M	M	→	→	
Issue 4.	**Weak national capacities for effective strategic planning and management**						
4.1	Conduct a capacity needs assessment in education planning and management, addressing the main capacity dimensions	H	L	L	→		
4.2	Based on the needs assessment, formulate a comprehensive capacity development strategy for education planning and management	H	L	L	→	→	
4.3	Enhance the Planning Directorate's human resource management function	H	L	L	→	→	
4.4	Further promote the culture of planning, monitoring and evaluation (M&E), and accountability within the education system	H	M	M	→	→	

TEACHER POLICIES AND DEVELOPMENT		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
Issue 1.	**Low teacher training capacity and inadequate teacher qualifications**						
1.1	Set up an integrated implementation plan with a road map to expand and improve the access to and quality of teacher training programmes	H	M	L	→	→	
1.2	Improve the capacity of teacher training institutions to absorb more trainees	H	M	M	→	→	
1.3	Implement targeted recruitment strategies to enrol higher numbers of students into mathematics, science, and technology teacher education programmes	H	M	M	→	→	
1.4	Provide greater training opportunities for teachers from community schools	H	M	M			
Issue 2.	**Inadequate continuous professional development programmes**						
2.1	Institutionalize a system to improve coordination and harmonization among providers and evaluators of teacher training programmes	H	M	L	→	→	
2.2	Prioritize the improvement of teacher resource centres at the different levels of the system	M	M	L	→	→	

TEACHER POLICIES AND DEVELOPMENT		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
2.3	Further develop capacities at national and sub-national levels for monitoring and evaluation of teaching and learning processes	M	M	M	→	→	
2.4	Strengthen monitoring and evaluation of CPD programmes to better understand its impact on teachers' performance and behaviour, and on the quality of education	H	M	M	→	→	
Issue 3.	**Inadequate policies for teacher remuneration and career opportunities**						
3.1	Revisit existing salary scales and incentive structures to encourage and facilitate improvements in the status and conditions of teachers and teacher educators	H	M	M	→	→	
3.2	Develop specific career pathways for the teaching profession at the different levels of the education sector	H	M	L	→	→	
Issue 4.	**Weak utilization of ICT for implementing CPD programmes**						
4.1	Equip schools and teacher training centres with modern ICT tools to support teaching and learning, as well as teacher CPD	M	M	M	→	→	
4.2	Make available effective programmes, and increase access to ICT tools, to improve teachers' and instructors' use of basic ICT and pedagogical skills	M	M	M	→	→	
4.3	Encourage the combination of online and offline teaching and learning resources among teachers and students	H	M	L	→	→	
4.4.	Promote consultations among users in order to agree on the best ICT solution	M	L	L	→		
4.5	Increase access to ICT tools by improving infrastructure in rural teacher training institutions	H	M	M	→	→	
Issue 5.	**Lack of facilities and resources and weak capacity and qualifications of staff at teacher education institutions**						
5.1	Improve facilities and provide relevant resources for all teacher training institutions to support INSET	H	M	M	→	→	
5.2	Put in place effective capacity development programmes to enhance the capacity and skills of current academic and support staff	H	L	L	→		
5.3	Strengthen existing capacity by employing competent staff to manage and coordinate INSET activities	M	L	M	→		
5.4	Reinforce M&E of CPD to understand capacity limitations and to develop mechanisms for sustainability	M	L	M	→		
5.5	Establish regulatory frameworks at decentralized levels with authority, management, and funding to support quality training for staff at TTIs	H	M	M	→	→	
Issue 6.	**Low status, morale, and professionalism of teachers**						

TEACHER POLICIES AND DEVELOPMENT		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
6.1	Prioritize the effective functioning of the Teaching Council of Zambia by ensuring the availability of funds as well as staff	H	M	M	→	→	
6.2	Ensure that an integrated policy framework for providing CPD programmes is aligned with the systems and policies of the TCZ	H	M	L	→	→	

TECHNICAL, ENTREPRENEURSHIP AND VOCATIONAL EDUCATION AND TRAINING (TEVET)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
Issue 1.	**Limited and inequitable access to TEVET**						
1.1	Expand the delivery facilities of TEVET by: (i) promoting collaboration with employers through adequate incentives; (ii) constructing and rehabilitating TEVET institutions	H	M	H	→	→	
1.2	Re-brand TEVET so that it is viewed more positively and provide pathways to further training	H	L	L	→		
1.3	Expand TEVET training opportunities to ensure inclusiveness and equity	H	M	M	→	→	
Issue 2.	**The reservation about the roll-out of the two-tier system being introduced by the Zambian authorities**						
2.1	Analyze carefully the pilot before taking any clear decision as to whether the two-tier system should be extended to other schools	H	L	L	→		
2.2	Provide proper and early counselling services and career guidance for students in order to help them make informed decisions	H	L	L	→	→	
2.3	Promote/develop effective cooperation between general education schools and TEVET institutions on ways of sharing teachers, programmes and facilities	H	L	L	→		
Issue 3.	**Inadequate public funding for TEVET**						
3.1	Improve funding to TEVET institutions in order for them to produce adequate number of quality skilled workers needed to achieve country's development vision	H	M	H	→	→	

TECHNICAL, ENTREPRENEURSHIP AND VOCATIONAL EDUCATION AND TRAINING (TEVET)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
3.2	Develop and implement a mechanism for sustainable financing of TEVET	H	M	M	→	→	
3.3	Consider to introduction a more realistic costing structure where the students pay a smaller proportion of actual training costs in public institutions	H	M	L	→		
3.4	Explore the possibility of introducing a training levy grant scheme on a sectoral basis, as a means of building up a pool of funds to support TEVET provision	H	M	L	→	→	
3.5	Provide incentives and strengthen partnerships with non-public stakeholders and industry to leverage more funding from the private sector	H	M	M	→	→	
Issue 4.	**Weak TEVET responsiveness to labour market**						
4.1	TEVETA should develop a closer and mutually beneficial collaboration between TEVET providers and industry	H	L	L	→	→	
4.2	Government should provide incentives to encourage workplace experience learning for TEVET students in order to ensure an effective transfer of relevant skills	H	M	M	→	→	
4.3	TEVETA should set up effective mechanisms to ensure that TEVET is aligned with the needs of employers and learners	H	M	L	→		
4.4	TEVETA should enhance the quality and the sustainability of the TEVET-MIS, and reinforce its linkages with CSO and the labour market data systems	H	M	L	→		
Issue 5.	**Curriculum not relevant to labour market**						
5.1	Ensure that TEVETA policy of regular curriculum review is effectively implemented	H	M	L	→		
5.2	TEVETA should ensure that design and delivery of curriculum are informed by industry's needs and trends	H	M	L	→	→	
4.3	TEVETA should ensure that entrepreneurship is effectively integrated in TEVET curricula and that trainers are trained in use of entrepreneurial pedagogies	H	L	L	→	→	
4.4	TEVETA should ensure that TEVET curricula are also informed by international trends	M	L	L	→		
Issue 6.	**Lack of quality trainers**						
5.1	Strengthen the systems of initial training, and review the Initial Training of Trainers Programme to better prepare and equip trainers	H	M	M	→	→	

TECHNICAL, ENTREPRENEURSHIP AND VOCATIONAL EDUCATION AND TRAINING (TEVET)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
5.2	Strengthen the systems for CPD, management, and support of TEVET trainers	H	M	M	→	→	
5.3	Restore public trainers to government payroll and pay them a decent salary in order to raise their status and morale	H	H	H	→	→	
5.4	Review and enhance the standards of accreditation for trainers, assessors, moderators, and examiners	H	M	L	→		
Issue 7. Low quality of training							
6.1.	Reinforce TEVETA to prioritise and direct financial resources for the revitalization of the TEVET institutions	M	M	M	→		
6.2.	Support TEVETA in enhancing its quality control mechanisms to ensure that all institutions meet quality standards	M	L	M	→	→	
6.3.	Strengthen the TEVET-MIS and ensure that data on system efficiency and quality are collected, analyzed and used for TEVET policy and planning	H	L	M	→		
6.4.	Ensure that the grading of training centres is regularly updated and made available to all relevant stakeholders	M	L	L	→		
6.5.	Support TEVETA to carry out regular and comprehensive tracer studies and publish the findings	H	M	M	→	→	

YOUTH AND ADULT LITERACY AND EDUCATION (YALE)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
Issue 1.	Lack of a comprehensive national YALE policy and weak reflection of lifelong learning perspective in YALE programmes						
1.1	The education policy should contain enabling provisions concerning YALE at both primary and secondary level	H	L	L	→		
1.2	The new education policy should be framed within a lifelong learning paradigm in line with the requirements of the SDGs	H	L	L	→		
1.3	Support the finalization of the Youth and Adult Literacy Policy drafted in 2009, in collaboration with key stakeholders, including CSOs and FBOs	H	L	L	→		

YOUTH AND ADULT LITERACY AND EDUCATION (YALE)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
1.4	Make provision for the creation of a national council on YALE, to be appointed by the Minister	H	L	L	→		
Issue 2.	**Limited and inequitable access to YALE**						
2.1	Convene leading figures in the private sector and leaders, encouraging them to mount YALE programmes for their staff members.	H	M	L	→	→	
2.2	DODE should enter into discussions with NGOs and FBOs engaged in YALE with a view to enabling them to expand their YALE programmes	H	L	L	→		
2.3	DODE should conduct or commission a gender survey concerning YALE to better understand how gender relations affect participation in YALE programmes	H	L	L	→		
2.4	DODE should devise a plan for expanded access to YALE, considering all recommendations made in this policy review	H	M	L	→		
2.5	MoGE should approach Cabinet with a submission on YALE, advocating the various changes that are needed	H	L	L	→		
2.6	Ensure that participants in government YALE programmes equivalent to primary-level education should not be charged user fees	H	L	M	→	→	
Issue 3.	**Inadequate funding, structures and capacity for YALE**						
3.1	MoGE should be capacitated, with adequate human and financial resources, to ensure policy development and implementation	H	M	M	→	→	
3.3	MoGE should undertake the profiling of the staff in place for YALE and the restructuring of DODE	H	L	L	→		
3.3	Develop and implement a training plan to ensure that staff members have the skills that are required of them	M	L	M	→		
3.4	Government should request assistance from the CoL in re-structuring ZACODE as a semi-autonomous college of open learning	M	L	L	→		
3.5	The UNZA, in collaboration with the MoE, should conduct a tracer study of graduates in adult education from the university	M	L	L	→	→	

YOUTH AND ADULT LITERACY AND EDUCATION (YALE)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
3.6	Infrastructures for YALE should be rehabilitated, expanded and constructed	M	M	H	→	→	
Issue 4.	**Issues related to quality, results, efficiency, and reputation**						
4.1	MoGE should be empowered to employ full-time and part-time staff, to develop curricula and study materials, to monitor and evaluate programmes…	H	M	M	→	→	
4.2	Government should conduct an evaluation of all literacy work and YALE centres under government auspices	H	L	L	→	→	
4.4	Government should make it possible for participants in YALE programmes to be assessed and awarded certificates	M	L	L	→	→	
4.4	MoGE should establish a robust database on all YALE programmes and, through EMIS, integrate the main data gathered in the annual statistical bulletin	M	L	L	→	→	
4.5	MoGE should formulate national standards for YALE professional educators and obtain acceptance of these standards by the qualifications authority	H	L	L	→	→	
4.6	MoGE should cultivate links, contacts, and exchanges with international and foreign organisations with a specialisation in YALE	M	L	L	→		
4.7	MoGE should employ as many graduates in YALE as possible to lead YALE programmes and gradually replace volunteers with staff members	M	M	M	→	→	
4.8	MoGE should give awards and recognize in every way possible those who do excellent work	M	L	L	→		

MONITORING AND ASSESSMENT OF LEARNING ACHIEVEMENT (MALA)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
Issue 1.	**Absence of a formative orientation of the current MALA system**						
1.1	Establish a comprehensive MALA framework and built-in system to complement the current summative assessment model with a formative one	H	L	L	→		
1.2	Promote formative assessment at school level by offering in-service training to teachers and school leaders	H	L	M	→	→	
1.3	Improve the capacity of individuals tasked with administering examinations, developing tests, and analyzing examination results	H	L	M	→	→	
Issue 2.	**Lack of use of MALA data to inform policy-making**						
2.1	The main educational stakeholders should work in tandem with ECZ to make effective and optimal use of MALA results to improve the quality of learning	H	L	L	→		
2.2	Monitor the impact of national large-scale assessment (NLSA) results on policy-making and implementation and provide funding for independent studies	H	M	M	→		
2.3	A formal national policy should be written to systematize the effective use of ILSA results in the education policymaking and policy implementation processes	M	L	L	→		
2.4	Coordinate and harmonize the use, analysis, and dissemination of assessment and survey results to design appropriate policies and actions for effective learning, teacher training, classroom instruction	H	M	M	→		
2.5	Use MALA results effectively to create alternative career pathways to increase equality of participation and to improve the results of disadvantaged students	H	M	M	→		
2.6.	MALA results should be provided in an accessible manner to reach major educational stakeholders	M	L	L	→		
2.7	Key stakeholders should contemplate the implications of national assessment verdicts	M	L	L	→		
Issue 3.	**Inadequate orientation of the current provision of CPD programmes for teachers in MALA**						
3.1	Institutionalize CPD programmes for teachers to effectively implement MALA at national, regional, district, and school levels	H	L	M	→		

MONITORING AND ASSESSMENT OF LEARNING ACHIEVEMENT (MALA)		Decision-making aspect (high/medium/low)			Time frame		
	Recommendations	Priority	Difficulty	Cost	short	Medium	Long
3.2	Increase internal capacity (through further training of human resources) at the MoE with a view to bolstering classroom and school-based assessment	H	M	M	→	→	
3.3	Increase the possibilities for teachers, especially those in the rural areas, to actively participate in the improvement of MALA through different capacity-building programmes	H	L	M	→		
3.4	Promote CPD through workshops, seminars, educational fora, and university-based certificates, diplomas, and degrees in assessment	M	L	L	→		
3.5	Develop and sustain capacity-building programmes for head teachers in CPD activities to improve their knowledge of MALA programmes, projects, and activities	H	L	L	→	→	
Issue 4.	**Lack of a comprehensive M&E system**						
4.1	Strengthen the country-specific M&E system for MALA in cooperation with l major stakeholders at MoE, departmental, regional, district, and school levels	H	M	M	→	→	
4.2	Explore and analyze good and cost-effective M&E practices for MALA, regionally and internationally, with a view to institutionalizing and strengthening the Zambian MALA system	H	L	L	→		
4.3	Further develop and strengthen the MALA M&E system with democratic structures and institutions, participatory governance, and the empowerment of civil society organizations, local educational managers, planners, and administrators to ensure broad-based commitment to quality education	H	M	M	→	→	