Zanzibar Education
Situation Analysis
Final report

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Executive Summary

Introduction

Background, objective and methodology for this situation analysis

The Revolutionary Government of Zanzibar (RGoZ), through its MoEVT, is developing a new education sector plan for 2016–20. It intends to develop this through a consultative Educational Laboratory (ELAB) approach. This involves all stakeholders working together over a finite period to review past progress and the current status of education as a basis for identifying issues and priorities, and for developing strategies for the future. Accordingly, the MoEVT commissioned this situation analysis to review the current status of the whole education sector. In tandem, the MoEVT also commissioned a review of progress on the first Zanzibar Education Development Programme (ZEDP) 2008/09–2015/16, and this review and the situation analysis are intended to provide the ELAB with the necessary background to assist in the process of developing the new education sector plan.

The situation analysis was conducted by Oxford Policy Management, involving a small team of international consultants and members of the MoEVT’s Department of Policy, Planning and Research (DPPR). The review is sector-wide but focused on issues identified by the MoEVT (and overseen by the Ministry). The work was guided by the Framework for Situation Analysis developed by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children’s Fund (UNICEF), and the World Bank for the Global Partnership for Education (GPE). The analysis draws on secondary data, largely provided by institutions under the Ministry and other stakeholders, and existing research studies. The analysis team conducted over 100 key informant interviews with staff from many departments, units and semi-autonomous bodies in the MoEVT, as well as a selection from development partners and other ministries. The work was carried out over the period October to December 2015.

Zanzibar in context

It is helpful to understand the recent trends in education within the wider context of Zanzibar. Demographic change has been substantial, with the population trebling from 350,000 in 1967 to 1.3 million in 2012. At the current growth rate, the population will double in the next 24 years, with serious implications for service demand. The population is growing twice as fast in urban areas as it is in rural areas, and Unguja (the largest island in the Zanzibar archipelago) is growing more rapidly than Pemba. Meanwhile, 40% of the population are under the age of 15, meaning that there is high pressure on education services and a high dependency ratio – particularly in urban areas.

Since 2007, Zanzibar's economy has grown in real terms by an average of 6.1% each year, bringing real gross domestic product (GDP) (2007 prices) up from USD (United States Dollars) 589 million in 2007 to USD 675 million in 2014. Zanzibar's economy is vulnerable to external factors, such as the weather and the global economy. Expected government revenue – and therefore budget – fell from 42% of GDP in 2010/11 to 33% of GDP in 2014/15. Actual spending varied between 85% and 99% of the planned budgets in the same period.

Structure of the Executive Summary

The rest of this Executive Summary is structured to mirror the full report. Each of the following headings matches the relevant chapters, covering all subsectors of education, as well as cross-cutting issues such as access, quality and sector financing. This Executive Summary aims to draw out briefly the key findings and issues from each chapter. Readers are encouraged to turn to the full chapters for topics of particular relevance and interest, in order to see the complete analysis.

Enrolment, internal efficiency and out-of-school children (OOSC)

The education system is in a period of transition to the 12 years of compulsory basic education stipulated in the 2006 Education Policy (two years of pre-primary + six years of primary + four years of secondary). The last primary cohort studying for seven years in the previous system will move to ordinary secondary education in 2016 (together with those completing the new six-year primary course). Progress in implementing the 2006 Education Policy on access to schooling (coverage) has been substantial but some key challenges remain.

The pre-primary system has been expanding capacity in the past six years. Enrolment has almost doubled, with growth concentrated in public (government-run) schools. Current capacity is between 33% and 50% of the eligible population, and more than a third of children are accessing pre-primary education. It is important to keep up the pace of this expansion towards full coverage, so that children enter Standard 1 (the first year of primary school) prepared for the curriculum content, which has been designed on the assumption that children have a pre-primary foundation.

The primary system continues to have sufficient places to enrol the eligible population, and almost all children enter primary school at some point. About 37,000 (15%) primary-aged children were out of school in 2014. Most of these children (about 25,000) can be expected to enter the system later, contributing to the number of late entrants to primary level and risking damaging effects on learning achievement and retention. Better understanding of the causes of the late entry phenomenon would help to inform interventions. Retention is good: most (89%) reach the final Standard, and almost all go on to ordinary secondary level.

However, the objective of four years of compulsory ordinary secondary education is not currently being achieved because the first cohort of students that fall under this policy is due to enter secondary school only in 2016. Currently access falls by half over the four-year cycle (from 86% to 43%). A large proportion of children leave the system after completing Form 2, which marks the end of basic education under the previous policy, or they leave after Form 4. To ensure that the cohort following the new policy will be retained in secondary school for four years, at a minimum there will need to be a review of the purpose and nature of the Form 2 examination, as well as steps to mitigate economic barriers to access.

Repetition rates are low in both the primary and secondary cycles, but they are relatively high in Standard 1, which is costly and unlikely to be an effective way of supporting weaker students to attain learning standards. Children without pre-schooling are likely to be particularly vulnerable to the risk of early repetition.

The gross enrolment rate (GER) at advanced secondary (Forms 5 and 6) has been declining since 2009 and is now at around 5%. This is partly explained by an increasing trend for Form 4 students who qualify for Form 5 to opt to enter colleges instead. It would be useful to carry out further research to find out why students are choosing this path and where they are studying.
Enrolment in the three public technical and vocational education and training (TVET) institutions is equivalent to 0.5% of secondary school places, so public provision is very limited. The number of places in private TVET courses is not systematically reported, but the Vocational Training Authority (VTA) estimates that this is at least four times as many as in public institutions. Tertiary institutions in Zanzibar are rapidly increasing capacity. When students studying on the mainland and overseas are taken into account, there are 794 tertiary students for every 100,000 inhabitants.

Cost and financing overview: government and household contributions

Education receives a sizeable share of Zanzibar’s resources, overall and from Government. The actual amount has grown in recent years, from TZS 59 billion in 2010/11 to TZS 90 billion in 2014/15. Over the past decade, the MoEVT’s spending has accounted for around 16–22% of the national budget, or 3.8–4.5% of GDP. This compares positively to international guidelines for governments to commit 15–20% of their budgets to education, and 4–6% of GDP.

In recent years, the balance between recurrent and development expenditure has shifted towards recurrent, with salaries accounting for 77% of spending in 2014/15, up from 60% in 2010/11. The proportion of spending given to development projects has fallen, and this mostly reflects a reduction in donor funds as some large projects have come to completion. Donor funds make up 90% of development expenditure.

While salaries are always prioritised and paid, non-salary recurrent spending is less likely to receive its full budget from the Ministry of Finance (MoF). In 2014/15 non-salary spending was only 68% of the original budget, whereas spending on salaries is usually 100% of the budget.

Households are estimated to allocate around 2% of their expenditure to education. In 2014 schools received an average of TZS 2,300 per student in primary and TZS 7,500 in secondary from parents. The decision by RGoZ in 2015 to abolish voluntary contributions and to provide the items needed by schools is likely to reduce this expenditure and help poorer parents.

However, the RGoZ decision comes with a number of implementation risks. First, schools will have no funds for discretionary needs, such as utilities. Second, there are likely to be inefficiencies in allocating items across schools, with some receiving more or less than they need. Finally, budgeted funds may not be made available to the MoEVT. There could be a serious impact on the quality of teaching and learning if these items are squeezed out. The MoEVT will need to plan for how to manage this, including its negotiating strategies with MoF, and its message to schools and parents on how they can continue to support education.

A closer look at the MoEVT budget

Salaries dominate the MoEVT’s recurrent spending, and in 2014/15 they accounted for TZS 70 billion, 90% of the total recurrent spending of TZS 80 billion. The remaining TZS 10 billion went to non-salary items, but this was only 68% of what had originally been approved in the budget for these items. This has implications for the planning and implementation of activities; the MoEVT is constantly having to reprioritise and make decisions on where to spend and what to postpone.

The departments in Unguja tend to receive more of their budgets than those in Pemba, which could be perceived as an inequitable distribution. However, the departments in Unguja actually carry out a large amount of spending which covers both islands, such as centrally procuring items for all schools. The semi-autonomous bodies receiving subvention also tend to have a higher execution rate for the non-salary recurrent budget than Pemba’s units.
Development expenditure has fallen quite substantially in the last two years. At under TZS 10 billion in 2014/15, development projects accounted for 10% of MoEVT spending, far less than the TZS 28 billion in 2012/13, which was almost 30% of spending. This reflects the impact of the stopping and starting of large projects – in particular after the World Bank-funded Zanzibar Basic Education Improvement Project (ZABEIP) project phased out in 2013. Although RGoZ accounts for the highest source of funds overall, for development projects the funds from donors vastly outweigh government contributions. Development projects include activities which should be considered ongoing – such as teacher training – so it may be preferable to see more of these costs covered by government, and to move these into the recurrent budget. Low execution rates of donor funds against the budget suggest challenges in accurate planning and implementation of activities, as well as some procedural hurdles.

Pre-primary and primary education receives the largest share of spending, at around 50%, although it has recently been declining. This is followed by secondary and then tertiary. However, when salaries and development expenditure are removed, tertiary takes over 50% of non-salary recurrent spending, mainly owing to the large amount spent on student loans. In terms of unit costs, the average recurrent spending per student is highest for TVET at the vocational training centres and Karume Institute of Science and Technology (KIST), generally TZS 2–4 million per student per year in the last five years. Secondary is next highest at around TZS 350,000 in 2014/15, followed by pre- and primary (TZS 129,000) and adult/alternative education (TZS 67,000).

Average teacher salaries are not high compared to international benchmarks, and are estimated to be around 2.2 times GDP per capita, compared to guidelines of 3.5. Component costs of construction and furniture vary by type of contract awarded; more expensive options may guarantee a higher level of supervision and therefore quality. Unit costs, particularly for construction, can increase quite noticeably in a short space of time.

**Student learning**

Levels of learning achievement are low at the primary and ordinary secondary levels.

At the primary level, learning achievement appears to have declined gradually over the past six years. Performance in mathematics at Standard 7 is particularly poor, with the majority of early grade students struggling to acquire foundational skills such as simple addition and subtraction. Standard 7 performance in language (Arabic, English and Kiswahili) is also relatively poor. A sizable group of students are struggling to learn to read in Kiswahili in the early years, but by Standard 6 a large group of students are competent readers (assuming that the situation has not declined markedly since 2007).

At the ordinary secondary level, average scores in the Form 2 examination are low and vary widely by subject. In 2014 average scores ranged from 43% for Kiswahili to 15% for mathematics. The Form 4 examination pass rate has been very volatile over the past six years, with year-on-year changes of between six and 26 percentage points. The gap between the Form 4 examination pass rate and the percentage of students achieving the grade needed to proceed to Form 5 is very large: in 2014, 57% of public students passed, while only 13% qualified to continue their studies. According to rigorous quantitative research, school factors, notably teachers' level of experience and qualifications, as well as their practices of regular marking of homework and continuous assessment, are key factors affecting Form 4 results.

The direct consequence of low learning is seen in the secondary cycle, where a very large proportion of students leave the schooling system. More than 20% of students entering secondary
education have failed the Standard 7 examination and are underprepared for the next stage of education. About 55% of enrolled Form 2 students pass the examination and transition to Form 3, while 45% either do not take the examination or fail the assessment.

The large variation in the Form 5 qualifying pass rate in recent years translates into considerable fluctuation in the transition rate between ordinary and advanced secondary, and in absolute numbers of students. Some students who qualify for Form 5, perhaps the majority in some years, opt to study in colleges for diplomas rather than to stay in school and take A-levels.

The Form 6 pass rate fluctuated around 80% for the four years from 2009/10, but in 2013/14 there was a marked increase to 96%. The share of candidates obtaining the highest divisions (I and II) also jumped from less than 10% in the earlier years to 20%.

The assessment system itself is problematic. The volatility in the externally set examination pass rates and pass rates by division over time, when access has not been shifting dramatically, raises questions about the validity and reliability of the test instruments. It seems unlikely that there is such volatility in the underlying skills and knowledge of students. The large variations in average scores in the internally set examinations in some subjects raise similar concerns. In addition, it is the opinion of informed stakeholders that the nature of the Form 4 assessment (type of questions, language) is, for many students, a considerable barrier to demonstrating their knowledge and skills. A comprehensive review of the assessment system should be undertaken, including analytical work on recent examination data to establish if the instruments are fit-for-purpose.

Teacher management and classroom availability

Teachers

Zanzibar is in a strong position in terms of teacher numbers: there are sufficient numbers of teachers at every level and the vast majority have a teaching qualification. Projections of supply of and demand for primary and secondary teachers indicate that numbers graduating are likely to be sufficient in the medium-term. However, there are issues concerning the focus of training: many pre-primary teachers are not qualified to teach at that level; there are limited numbers of mathematics and science teachers; and most teachers have a very limited grasp of English, the language of instruction for four subjects at upper primary level and all subjects at secondary.

In addition, the utilisation of teachers is inefficient. Processes for assessing teacher need and deploying recruited teachers are opaque and the recruitment process needs more educational input. The modalities for identifying teacher needs (including parameters of demand) and for recruiting and deploying teachers should be assessed and revised and final agreements communicated to all levels of the MoEVT – school, district education office and headquarters departments.

Utilisation at the school level is inefficient for a number of reasons: from pre-primary to secondary, a shortage of classrooms restricts the number of classes and this reduces the number of contact hours; and at primary level teachers of Standards 1–4 who should teach whole classes, do not. A study of the time teachers actually spend in class teaching and the reasons for this, as well as classroom observations of the way they teach, would be useful for informing future improvements.

In-service pedagogical support through Teacher Centres (TCs) and distance and e-learning courses for serving teachers all show promise but the TCs need resources to help their work. An evaluation of the current provision of teacher education, including pre-service and in-service, covering quality at entry and graduation and impact of graduates at school level could provide
valuable information to schools and the MoEVT. Issues of deployment, utilisation and adequate training are all connected with the motivation and morale of serving teachers, which is giving cause for concern.

**Classrooms**

There is an acute need for more classrooms and infrastructure across the levels of schooling. With plans to expand pre-primary, an increase in enrolment to cover 50% of 4–6 year olds would need 140 new classrooms per year up to 2020.

At the primary level there is already a huge shortage, with 39% of classrooms used for double-shifting. About 60 new primary classrooms need to be constructed per year until 2020 simply to keep up with population growth. There is also a wide geographical disparity in the availability of classrooms in primary schools: pupil to classroom ratios range from 41:1 in South to 92:1 in Micheweni (public and private combined).

At the secondary level, the average class size is currently 38:1 but 20% of classrooms are used for double-shifting. There is a wide geographical disparity in the availability of classrooms in secondary schools: the pupil to classroom ratio ranges from 31:1 in Central to 64:1 in Urban (public and private combined). With a double-cohort entering Form 1 in 2016, there will be enormous pressure on the physical infrastructure: about 150 additional classrooms will be needed per year up to 2020 to cope with this.

**System capacity**

The MoEVT central departments and units cover all key education subsectors and issues, and the autonomous agencies replicate those in well-functioning systems. Many of the agencies have clearly defined functions and even staff but very limited other resources to perform their functions. This creates stasis and can have little positive impact on pupil learning. At the central MoEVT level, most staff lack job descriptions, and there has been limited revision of roles and responsibilities to meet the needs of the 2006 Education Policy. A study of the current system that examines roles and functions and their impact on learning outcomes should be undertaken. This could be followed by a study of the costs and cost-effectiveness of each unit within a realistic resource envelope.

The decentralisation modalities involving Regional and District Education Offices are not well understood even by Regional Education Officers (REOs) and District Education Officers (DEOs), and while these function well in large countries it could be questioned whether Zanzibar benefits from this type of decentralisation and whether it supports pupil learning. The Enacted Law of Local Authority is likely to have a profound effect on responsibility for education delivery. This will need analysis and discussion, and the impact on each agency will need to be determined.

The process of discussing and planning desirable policy measures, such as establishing autonomous agencies or extending the years of compulsory schooling may not have included a medium-term analysis of the finance needed and of affordability.

Zanzibar's intention to lessen the burden on parents by removing voluntary contributions at pre-primary and primary levels should strengthen equity in access to education, but its implications for school management need further study. Given that schools are already able to manage voluntary contributions the study should further examine whether school grants enabling some school-based expenditures would be useful in Zanzibar.
Equity

There is considerable inequality at all levels of education: in learning achievement, in access to education, and in resourcing of education.

Gender disparities are evident in learning outcomes and in rates of exclusion from school, but the picture is inconsistent. Boys of primary age are far more likely to be excluded from school than girls, putting them at greater risk of over-age entry or of never entering school. Girls also outnumber boys in secondary schools in all districts. There is little gender inequality in either the Standard 7 or Form 4 pass rates overall; however, girls outperform boys on the Form 2 examination, while boys outperform girls in passing the Form 4 examination and qualifying for Form 5. Evidence from a recent early grade learning assessment found that girls perform better than boys in Kiswahili reading skills, while the opposite was true in mathematics. Systematic qualitative research in classrooms would be useful in trying to understand the causes of this. Gender inequality in pass rates varies a lot across districts, especially as the level of the examination increases. Examination performance tends to be better for boys than girls in Pemba and North A on Unguja, while it is much better for girls than boys in the Central and South districts of Unguja.

There are large geographical differences in examination performance, capacity and take-up of education, and exclusion from school. Children of primary- and secondary-age are much more likely to be out of school if they live in a rural area. The capacity and take-up of education services is comparatively low in Pemba’s four districts and in North B (Unguja). Pemba is also relatively disadvantaged in teacher allocation, and some of its districts have some of the worst classroom shortages too. There are very large disparities in examination pass rates across districts; the gap is particularly large for the Form 4 examination. The performance of districts relative to one another is not consistent in the different examinations.

Household poverty is the factor most strongly associated with primary- and secondary-age children being out of school. For example, boys who live in the poorest fifth of households have a 43% chance of not being in primary school. Careful consideration of both the direct and indirect private costs of education, as well as the opportunity costs, at all levels is important in designing a coherent strategy to mitigate this barrier. The recent policy of abolishing voluntary parental contributions for pre-primary and primary students is a positive step, and should reduce barriers for poor families.

Children with disabilities have considerably higher rates of school exclusion than average, and it is likely that there are other groups of marginalised children that are not visible in the statistics available. Among the barriers facing children with special educational needs are a lack of appropriate physical infrastructure and shortages of teaching and learning materials. The scale of the problem is not clear, and it would be useful to have more systematic data on material needs and current provision in order to prioritise resources to meet inclusive education goals.

Early childhood development (ECD)

Estimates suggest that between a quarter and half of Zanzibar’s children have access to pre-school, and enrolment has increased from around 30,000 in 2010 to 42,000 in 2015. Of total enrolment in pre-primary centres in 2015, 55% are enrolled in privately run pre-schools and the rest in government schools or (Tucheze Tujifunze – learning through play) Tutu centres. Many of those who are enrolled are over-age. Income is a barrier to accessing pre-school: children in the richest fifth of households are more than four times as likely to access pre-school as the poorest fifth.
As part of the drive for universal access to pre-primary education, Government primary schools are encouraged to open pre-primary classes. However, many details are yet to be worked out, such as allocation of classroom space and finding motivated and qualified teachers. It has not been widely communicated that parents' contributions are now banned, causing uncertainty for parents and schools. Community schools and Tutu centres are already under-resourced, and competition from new government pre-primary classes may drive these other centres to close. Implementation plans should be developed for the next five years of different government sector growth scenarios, including teachers, classrooms and finance needed and the likely implications for private providers and for primary schools.

The new pre-primary classes attached to primary schools may suffer if the head teachers, teachers and parents are not well sensitised in the needs of early childhood education (ECE). The teaching style may be too academic, the content infiltrated by Standard 1 curriculum, and resources prioritised for higher levels in the school. This is a problem that needs immediate attention.

Teaching at the pre-primary level has had a low reputation, not helped by the lack of ECE training courses in Zanzibar. There are now efforts to increase the training opportunities for teachers in pre-primary schools, with cooperation between new courses at the State University of Zanzibar (SUZA), Madrasa Early Childhood Programme (MECP), the E-Learning Division, TCs and education colleges. Teachers should be placed in a pre-primary classroom only if they choose to be there, and then they should be given appropriate support and training.

The pre-primary curriculum was revised by the Zanzibar Institute of Education (ZIE) in 2012, and is the standard for both public and private pre-primary schools. The curriculum aims to equip children with the three 'R's – reading, writing, and arithmetic – in preparation for Standard 1, and covers six subjects in total. Interviewees noted that the overloaded primary curriculum (particularly since the abolition of Standard 7) has led to some topics shifting down to the pre-primary curriculum, which may not be appropriate for such early grades. In addition, some teachers start teaching the primary curriculum at pre-school level to get ahead. This has additional consequences for the majority of children who enter primary directly, without the required preparation from pre-primary level.

**Tertiary education**

With three universities, three teachers' colleges and six other Government colleges offering tertiary courses, Zanzibar's participation rates are well above the African average.

The absorption of some of the other Government institutions into SUZA should help quality. However, caution is needed to ensure that some continue to offer non-degree courses that serve the broader world of work.

The exam performance of secondary school leavers and the consequent small pool available for entry to universities is a cause for concern. This is particularly a problem in science and technology courses. While this needs to be dealt with at the secondary school level, universities may have a role in supporting these efforts, perhaps through pre-entry courses.

An additional concern is current employment rates for graduates of these tertiary institutions. As universities diversify provision and subjects, it will become more important to monitor industrial demand and the employment of graduates. Tracer studies of graduates should be carried out regularly and results discussed by providers, Government and the private sector.

The establishment of the Zanzibar Higher Education Loans Board (ZHELB), which provides loans, is a significant benefit to some Zanzibar families, and degrees in disciplines needed by Zanzibar
are targeted by the Department of Planning. Given the poor repayment record elsewhere in Africa, long-term calculations of returns are needed to determine likely future finance requirements. Over half of the MoEVT’s non-salary recurrent expenditure went to student loans in 2014/15 (TZS 5.8 billion out of TZS 10.8 billion), highlighting the need to review the costs and benefits of the scheme and examine other parameters. A full cost-benefit analysis of the current loan scheme design and of other design options would be valuable.

Tertiary education as a whole currently takes about 17% of MoEVT expenditure and this will rise as SUZA absorbs other Government training institutions. Unit costs per graduate for SUZA are relatively high, but these unit costs are likely to reduce as the institution enters a more stable growth phase.

**Adult literacy, alternative and continuing education**

Literacy rates increased from 71% to 80% over the decade to 2012 (census estimates), while at the same time the gender gap narrowed to four percentage points, down from 14 percentage points a decade earlier. Two-thirds of non-literate adults are female, and they are more likely to enrol in literacy classes than non-literate men. However, adult literacy classes cater only for about 6% of non-literate adults. Enrolment is fairly stable, suggesting continued demand, but retention in adult literacy classes is a problem – with only around one-quarter of the number of Stage One learners reaching the final Stage.

Many of those adults who do reach the final stages of the literacy programme are acquiring relevant skills. The majority report that they can read and write letters, but struggle with understanding large numbers, and can carry out some essential tasks that require literacy, such as reading a doctor’s prescription. This is a considerable achievement given that the service is chronically under-resourced. The low-cost model uses existing buildings, pays a meagre allowance to secondary school leavers as teachers, and provides some fuel for District Adult Education Coordinators as well as some teaching and learning materials. The service could be much more effective if the teachers had regular in-service training and an adequate supply of teaching and learning materials.

School-based alternative learning classes for children who have never entered school cover roughly 7% of the target group. About two-thirds of students enrolled go on to join the formal system. The alternative learning programme providing pre-vocational skills for young people aged 15–22 years caters for an important need, but coverage is remarkably low and the service is only available in one institution in Urban district. Many teachers at the centre do not have vocational or technical expertise, and many are underutilised. The centre needs to ensure that all of its courses are relevant to the needs of potential enrollees, and that they are adaptive to changing demand.

The continuing education programmes cover a diverse range of small services. Enrolment is dropping and coverage of the target populations is extremely limited. Learners pay contributions for all programmes, unlike adult literacy or alternative learning students.

Basic data needed to effectively manage services is not readily available, and the limited data available is inconsistent between sources and is not integrated into the Education Management Information System (EMIS). The lack of readily available information on pass rates or completion rates is an important data gap, and an evaluation into this subsector using primary research would be useful.
TVET

There is a limited number of Government providers but a large number of private providers of training courses in Zanzibar. Courses provided by KIST appear to be in demand, courses in the three vocational training colleges (VTCs) do not, and females are under-represented in all MoEVTP courses.

The VTA directly oversees the VTCs and has a quality assurance (QA) role with private providers. However, oversight of private providers is very limited and quality is not ensured even in the VTCs. Independent observers find weak staff qualifications and limited equipment and workshops. The VTA should strengthen its oversight of private providers and ensure that quality assessments are made available to the public.

Finance for VTA needs to be secure, predictable and utilised in consultation with employers. A Skills Development Levy is paid by employers to the Government but it is not clear where the money goes or for what purposes it is used. The MoF should transfer the Skills Development Levy transparently to the VTA, which should use the levy monies for training activities determined in consultation with employers.

Linkage between the VTA, VTCs and KIST on the one hand and employers and entrepreneurs on the other should be strengthened: one way would be to commission tracer studies of graduates and act on these; another would be to involve more employers in VTC boards.

Conclusion

This situation analysis has identified a number of successes in Zanzibar's education sector: expanding access at primary level; making rapid strides in access to pre-primary; providing in-service support to teachers through TCs; having a high proportion of qualified teachers; coordinating efforts to raise teacher qualifications at pre-primary; enrolling more students in tertiary education; and supporting them with student loans. In addition, the Government has committed a good amount of funds to education, at 16–22% of national spending in the last 10 years.

However, significant challenges remain: the effect of income, geography and to some extent gender on access to education and learning; the low levels of learning at primary and ordinary secondary levels; the validity of the examination system; the shortage of classrooms affecting teacher utilisation and class sizes; the opaque and inefficient teacher deployment; the limited demand for vocational training courses; the inadequate supervision of private providers of training; and the sustainability of financing for student loans. An overriding theme is that planning and preparation for policy directives needs to improve – to realistically prepare for the eventualities, the financing needs, and the implementation modalities, and to manage communication with other stakeholders. Capacity to convert high-level strategies into implementation plans, with adequate resources and monitoring and evaluation systems, was also highlighted as a barrier to successful progress in the ZEDP review.

The upcoming ELAB will present an opportunity for the Ministry and education sector stakeholders to review all the progress and remaining issues, in order to set a new agenda for the next five years. Recommendations from the ELAB may include a number of further studies into issues raised in this report, to better understand the problems and plan for solutions. The Ministry may want to look for support in strengthening its planning process, giving more time and resources to preparing medium-term implementation plans as an input to decision-making.
# Table of contents

Acknowledgements i
Executive Summary ii
List of figures, tables and boxes xv
List of abbreviations xviii
1 Introduction 1
   1.1 Overview 1
   1.2 The social, humanitarian and demographic contexts 4
   1.3 The macroeconomic and public finance contexts 7
   1.4 Conclusion 8
2 Enrolment, internal efficiency and OOSC 10
   2.1 Overview of education system 11
   2.2 Evolution of enrolment and education system enrolment capacity 13
   2.3 Schooling coverage 16
   2.4 Access and retention: supply and demand factors 19
   2.5 Internal efficiency 20
   2.6 OOSC 22
   2.7 Conclusion 23
3 Cost and financing overview: government and household contributions 25
   3.1 Introduction 25
   3.2 Overview of MoEVT spending 25
   3.3 Ministry spending in the national context 28
   3.4 Execution against budget 29
   3.5 Household contributions and school income 32
   3.6 Conclusions 35
4 A closer look at the MoEVT budget 37
   4.1 Introduction 37
   4.2 Recurrent spending in 2014/15 37
   4.3 Spending by sub-sector 39
   4.4 Development projects 42
   4.5 Unit costs of education 45
   4.6 Conclusions 50
5 Student learning 51
   5.1 Assessment of student learning 51
   5.2 Primary school students' learning 53
   5.3 Ordinary secondary school students' learning 56
   5.4 Advanced secondary students' learning 60
   5.5 Conclusion 61
6 Teacher management, classrooms and other resource availability 63
   6.1 Current teacher numbers and their qualifications 63
   6.2 Current providers of teacher education 65
   6.3 Observations on teacher supply 66
   6.4 How many teachers does Zanzibar need? 67
6.5 Quality of teacher training provision at the three levels 71
6.6 Deployment of teachers: are teachers where they are needed? 72
6.7 Methods of assessing teacher needs, recruitment and deployment 73
6.8 Utilisation of teachers 74
6.9 Teacher conditions and behaviour 75
6.10 Current in-service provision and assessment of adequacy 76
6.11 Concluding remarks on teacher management 78
6.12 Classroom availability and needs 78
6.13 Concluding remarks on classroom availability and needs 80
6.14 Availability of other resources in public schools 81

7 System capacity 83
7.1 Introduction 83
7.2 MoEVT and vocational training 83
7.3 ZIE 86
7.4 ZEC 87
7.5 Chief Inspector of Schools 87
7.6 The NTRC 88
7.7 VTA 88
7.8 Observations 88
7.9 Decentralisation: islands, regions and districts 89
7.10 School level 91
7.11 Conclusions 95

8 Equity 96
8.1 Introduction 96
8.2 Inequality in learning achievement 97
8.3 Inequality in enrolment capacity and exclusion 101
8.4 Inequality in resourcing 105
8.5 Some reasons for inequality in education 106
8.6 Conclusions 107

9 ECD 109
9.1 Introduction 109
9.2 Institutional structure 110
9.3 Service provision 110
9.4 Stocktaking of early childhood indicators 116
9.5 Equity 118
9.6 Quality 119
9.7 Conclusions 124

10 Tertiary education 126
10.1 Numbers and participation rates in tertiary education by Zanzibari students 126
10.2 Current efforts to rationalise publicly supported tertiary education 127
10.3 ZHELB 128
10.4 Entry to universities 129
10.5 QA 130
10.6 Links to employment and the world of work 130
10.7 Student fees 131
10.8 Government contributions for tertiary education 132
10.9 SUZA 133
10.10 Conclusions 139

11 Adult literacy, alternative learning and continuing education 140
11.1 Introduction and policy context 140
11.2 The structure of the subsector 141
11.3 Needs and participation 144
11.4 Resourcing modalities 148
11.5 Quality and relevance 149
11.6 Conclusions 151

12 TVET 152
12.1 Background and recent developments 152
12.2 Oversight and regulation 154
12.3 Staff and other quality enhancing inputs 155
12.4 Apprenticeship 156
12.5 Links with the labour market 156
12.6 Employer training 157
12.7 Government financial contribution to TVET 157
12.8 Conclusions 161

13 Conclusion 162
13.1 Introduction 162
13.2 Enrolment, internal efficiency and OOSC 162
13.3 Cost and financing overview 163
13.4 A closer look at the MoEVT budget 163
13.5 Student learning 164
13.6 Teachers and classrooms 164
13.7 System capacity 165
13.8 Equity 165
13.9 ECD 166
13.10 Tertiary education 166
13.11 Adult and continuing education 167
13.12 TVET 167
13.13 ZEDP review 168
13.14 Concluding remarks 168

References 170
List of figures, tables and boxes

Figure 1: Trends in total population and average annual growth, 1967–2012 ........................................... 5
Figure 2: Trends in population and average annual growth by region, 2002–2012 ................................. 6
Figure 3: Budgeted (expected) revenue and expenditure, 2010/11 to 2014/15 ........................................... 7
Figure 4: National budget execution rates: spending against original budget (RGoZ funds only) ........... 8
Figure 5: The structure of the Zanzibar education system ........................................................................... 12
Figure 6: Trends in GERs by subsector, 2009–2015 .................................................................................. 15
Figure 7: Education pyramid for Zanzibar 2014 ....................................................................................... 17
Figure 8: Retention profiles for the primary and secondary cycles (public students), 2010 and 2014 (%) ................................................................................................................................. 19
Figure 9: Repetition rates (public schools) 2010 and 2014 (%) .................................................................. 21
Figure 10: OOSC of primary age by past or expected school exposure (estimated 2014) ....................... 23
Figure 11: MoEVT budget and expenditure, 2010–11 to 2014–15 ............................................................... 26
Figure 12: MoEVT expenditure by main allocation category (%), and by type (TZS billions), 2010/11–2014/15 ......................................................................................................................................... 27
Figure 13: Categorisation of budgets and spending in the MoEVT ............................................................... 27
Figure 14: Resources committed to education: MoEVT spending as a % of GDP and of the national budget ........................................................................................................................................ 28
Figure 15: MoEVT budget as a % of national budget .................................................................................. 29
Figure 16: Actual expenditure: allocation of Ministry salaries, non-salary recurrent and development to MoEVT and to other ministries, 2014 .................................................................................. 29
Figure 17: Execution rates: MoEVT recurrent spending against original budget by type .................... 30
Figure 18: Execution rates: MoEVT non-salary recurrent spending against original budget ............ 31
Figure 19: Execution rates: MoEVT development spending against original budget .......................... 31
Figure 20: Primary school income from parents' voluntary contributions, 2014 ....................................... 33
Figure 21: Secondary school income from parents' voluntary contributions, 2014 ............................... 34
Figure 22: Recurrent spending by major departments in 2014/15: actual and execution ..................... 38
Figure 23: Spending: recurrent and development by sub-sector ............................................................... 40
Figure 24: Recurrent spending by sub-sector ............................................................................................ 41
Figure 25: Non-salary recurrent spending by sub-sector .......................................................................... 42
Figure 26: Development spending by sub-sector ..................................................................................... 42
Figure 27: Development project: actual spending and execution of spending against the budget ....... 43
Figure 28: GPE programme expenditure to date ....................................................................................... 44
Figure 29: SIDA education sector support programme spending 2012/13 and 2013/14 .................... 45
Figure 30: Cost per student of education based on MoEVT expenditure ................................................. 46
Figure 31: Unit costs of construction depending on building and contract type and year .................... 48
Figure 32: Unit costs of furniture .............................................................................................................. 49
Figure 33: Examination pass rates (%), 2009 to 2014 ............................................................................. 53
Figure 34: Average scores in Standard 7 examination (%) by subject, 2010 and 2014 ....................... 54
Figure 35: Proportion of Standard 6 students reaching reading and mathematics competencies (%) in 2000 and 2007 .................................................................................................................. 55
Figure 36: Average score (%) by subject in Form 2 examination, 2010 and 2014 ............................... 57
Figure 37: Form 4 examination pass rate (%) high enough to enter Form 5, by public and private school students, 2009 to 2014 ............................................................................................................. 59
Figure 38: Form 6 pass rate by division (%), 2009/10 to 2013/14 ............................................................ 61
Figure 39: Distribution of teachers in government schools by qualification at different levels of education, 2014 ........................................................................................................................................ 64
Figure 40: Structure of the MoEVT ........................................................................................................... 85
Figure 41: Time spent by head teachers on management courses ........................................................... 92
Figure 42: Share of teacher responses who feel they are held accountable by the head teacher ... ......................................................................................................................................................... 93
Figure 43: Range of gender parity indices in examination pass rates across districts, 2013 ................ 98
Figure 44: Range of examination pass rates (%) by district, 2013 ............................................................ 100
Figure 45: District ranking of examination pass rates, 2013 ................................................................. 100
Table 1: Enrolment trends by level and type of provider, 2009–2015
Table 2: Internal efficiency indicators, 2010 and 2014
Table 3: Proportion and number of OOSC of primary and secondary age
Table 4: Schools’ income from parents, 2014
Table 5: Voluntary contributions for Mtemani Primary School
Table 6: Expenditure by MoEVT departments on plant and equipment (capital) and supplies and consumable goods, 2014/15
Table 7: UNICEF-funded spending for 2012/13 to 2015/16
Table 8: Unit costs: average recurrent spending per student and comparisons with the pre-primary and primary unit cost (TZS)
Table 9: Gross salaries of civil service personnel at MoEVT (TZS)
Table 10: Textbook procurement from 2007/8 to 2014
Table 11: Teachers in government and private schools 2012–14 by level
Table 12: Institutions offering different courses for teachers in Zanzibar
Table 13: Distance education course enrolment and graduates since 1997
Table 14: Projections of teacher needs for pre-primary, 2015 to 2020
Table 15: Projections of teacher needs for primary, 2015 to 2020
Table 16: Projections of teacher needs for secondary, 2015 to 2020
Table 17: Estimate of annual teacher supply and possible demand at certificate, diploma and education degree level by provider in 2015
Table 18: Pupil to Teacher ratios across Zanzibar’s districts 2014
Table 19: Average periods by teachers in two primary and one secondary school
Table 20: Teachers’ reported frequency of receiving in-service training
Table 21: Pupil to classroom ratios, double-shifting and class sizes by district, public and private schools, 2014
Table 22: Other resources in public pre-primary, primary and secondary schools, 2014
Table 23: GPI in examination pass rates by district, 2013.............................................. 99
Table 24: District ranking by GERs (%) 2014.................................................................. 102
Table 25: Enrolment of students with disabilities in pre-primary, primary and secondary schools (public and private), 2014 ........................................................................ 104
Table 26: District ranking of PTRs in public schools by subsector, 2014.......................... 105
Table 27: District ranking of pupil-classroom ratios in public schools by subsector, 2014... 106
Table 28: Health and nutrition indicators for selected years........................................... 116
Table 29: Pre-primary schools access to water and toilet facilities, 2014......................... 124
Table 30: Enrolment in tertiary education institutions within Zanzibar............................ 127
Table 31: Information available on some government-supported institutions in Zanzibar ... 128
Table 32: Degree courses offered prioritised by ZHELB and the total number of students receiving loans by institution.......................................................... 129
Table 33: RGoZ recurrent expenditure on tertiary education, 2014/15 (TZS millions) ... 132
Table 34: SUZA graduates 2010/11 to 2014/15.......................................................... 134
Table 35: SUZA enrolment and unit costs, 2014/15.................................................... 138
Table 36: SUZA graduates and income: unit costs per graduate................................. 138
Table 37: Structure of adult education and continuing education subsector................. 143
Table 38: Trend in the population literacy rate (%) and number of non-literate adults by gender ........................................................................................................... 144
Table 39: Trends in enrolment in other continuing education programmes, 2012 to 2015.... 147
Table 40: Enrolment in KIST by gender and NTA level, 2013–2015................................. 152
Table 41: Enrolment in public VTCs by gender and year of study, 2013–2015................ 153
Table 42: Total enrolment in VTCs and KIST ................................................................. 153
Table 43: Government recurrent expenditure on TVET, 2014/15 (TZS millions) .......... 158
Table 44: VTA and VTCs income, 2014/15 (TZS)....................................................... 158
Table 45: VTA and VTCs expenditure, 2014/15.......................................................... 159
Table 46: Vitongoji VTC expenditure, 2014/15......................................................... 160
Table 47: Skills Development Levy sources 2008/09 to 2011/12 in TZS '000s ................. 161

Box 1: Key findings: An introduction .............................................................................. 1
Box 2: Key findings on enrolment, internal efficiency and OOSC ................................ 10
Box 3: Comparison of GER estimates from different sources .................................... 16
Box 4: Key findings of the cost and financing overview ............................................... 25
Box 5: Understanding MoEVT financial reporting and expenditure categories ......... 27
Box 6: The budgeting process ................................................................................. 32
Box 7: Finances at Mtemani Primary School, Micheweni ........................................... 35
Box 8: A closer look at the MoEVT budget: key findings ........................................... 37
Box 9: Key findings on student learning ...................................................................... 51
Box 10: Summary of views of stakeholders on reasons for poor Form 4 examination performance ........................................................................................................ 60
Box 11: Key findings on teachers, classrooms and other resources ....................... 63
Box 12: Key findings on system capacity .................................................................... 83
Box 12: Key findings on equity ................................................................................ 96
Box 13: Key findings on ECD .................................................................................. 109
Box 14: Pre-primary classes at Karange Primary School, North B district ......... 112
Box 15: The MECP in Zanzibar ............................................................................. 114
Box 16: Tumbe Kojifa Tutu Centre, Micheweni District ........................................ 115
Box 17: Mfenesini Pre-primary school and in-service training at Saateni TC .......... 122
Box 18: The Early Childhood Advancement Certificate Programme (ECACP) for upgrading primary teachers to pre-primary .................................................. 122
Box 19: Key findings on tertiary education ............................................................. 126
Box 20: Key findings on adult literacy, alternative learning and continuing education .... 140
Box 21: Case study of adult literacy class, Urban district ....................................... 148
Box 22: Key findings on TVET ............................................................................. 152
Box 23: Case study: ZIToD. .............................................................................. 157
List of abbreviations

AfDB  African Development Bank
ALCE  Adult learning and continuing education
ALSD  Alternative Learning and Skills Development
BADEA  Arab Bank for Economic Development in Africa
CHS   College of Health Sciences
CSEE  Certificate of Secondary Education Examination
DEO   District Education Officer
DHS   Demographic and Household Survey
DPPR  Department of Policy, Planning and Research
ECD   Early Childhood Development
ECACP  Early Childhood Advancement Certificate Programme
ECE   Early Childhood Education
EFA   Education for All
ELAB  Educational Laboratory
EMIS  Education Management Information System
ESA   Education Sector Analysis
GDP   Gross domestic product
GER   Gross enrolment rate
GPI   Gender parity index
GPE   Global Partnership for Education
HBS   Household Budget Survey
HESLB Higher Education Students’ Loans Board
IFMIS  Integrated Financial Management Information System
IPA   Institute of Public Administration Zanzibar
KIST  Karume Institute of Science and Technology
MECP  Madrasa Early Childhood Programme
MESWYWC Ministry of Empowerment, Social Welfare, Youth, Women and Children
MKUZA Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Zanzibar
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<thead>
<tr>
<th>Acronym</th>
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<tbody>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>USD</td>
<td>United States Dollars</td>
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<tr>
<td>VETA</td>
<td>Vocational Education and Training Authority</td>
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<td>VTA</td>
<td>Vocational Training Authority</td>
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<td>VTC</td>
<td>Vocational Training College</td>
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<td>ZABEIP</td>
<td>Zanzibar Basic Education Improvement Project</td>
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<td>ZEC</td>
<td>Zanzibar Examinations Council</td>
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<td>ZEDP</td>
<td>Zanzibar Education Development Programme</td>
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<td>ZHELB</td>
<td>Zanzibar Higher Education Loans Board</td>
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<td>ZIE</td>
<td>Zanzibar Institute of Education</td>
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<td>ZIFA</td>
<td>Zanzibar Institute of Financial Administration</td>
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<td>ZISP</td>
<td>Zanzibar Improving Student Prospects</td>
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<td>ZIToD</td>
<td>Zanzibar Institute of Tourism Development</td>
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<td>ZU</td>
<td>Zanzibar University</td>
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1 Introduction

Box 1: Key findings: An introduction

Context for this situation analysis

- Education has been a key component of Zanzibar's national development plans for the last 15 years. As the ZEDP comes to the end of its intended implementation period, the sector, led by the MoEVT, is preparing to develop a new programme for 2016 to 2020.
- The MoEVT will convene an ELAB to engage wide stakeholder consultation and participation in developing the new programme.
- This situation analysis aims to set out the current context and recent trends in the sector, to inform participants' discussions and eventual recommendations at the ELAB.
- Alongside this situation analysis, a review of implementation progress of the ZEDP was carried out by another team, and both reports should be used together to inform the ELAB.

Social indicators

- Over the last 50 years Zanzibar's population has grown substantially, and with more than 40% of the population under the age of 15, there are implications for future demand for services.
- It is estimated that 44% of Zanzibaris live in poverty. Access to safe drinking water is good, but there are still challenges of malnutrition in children, and high risk of malaria in adults. HIV/AIDS is not a major problem in Zanzibar – only 1% of the population are infected.

Economic indicators

- There has been relatively good economic growth in the last decade, averaging 6.1% over the last seven years. However, with a dependence on agriculture, trade and tourism, Zanzibar is vulnerable to external shocks, such as the weather and the global economy. In 2014, GDP per capita was USD 939.
- The Government's expected revenue collection – and therefore funds available for the national budget – fell from 42% of GDP in 2010/11 to 33% of GDP in 2014/15.
- Zanzibar is highly dependent on external financing for its national budget. Loans and grants for development projects make up around a third of expected revenue, and donors also provide general budget support.

1.1 Overview

1.1.1 Education in Zanzibar's national policies

Zanzibar joined Tanganyika to form the United Republic of Tanzania in 1964, but is semi-autonomous. It has its own Government, a legislative assembly, the Executive, headed by the President of Zanzibar, and its own judicial system. The RGoZ has responsibility for matters internal to Zanzibar and for overseeing development in key sectors, including education, with the exception of higher education, which remains a Union matter.

Education has been a key component of Zanzibar's national development plans for the last 15 years. Zanzibar's commitment to education aligns with the wide international debate and literature on the importance of education for national development. Education gives people the critical skills and tools to help them provide better for themselves and their children, raising their living standards. It creates access to more employment opportunities, and through greater productivity it contributes to sustainable economic growth. Better education can improve health outcomes such as reducing the spread of HIV/AIDS and reducing mother and child mortality. In addition, a well-educated population can participate more in the community and public debate, raising accountability, transparency and good governance.²

² Taken from [www.globalpartnership.org/education](http://www.globalpartnership.org/education).
In 2000, the Government adopted Vision 2020, which aims to eradicate absolute poverty in Zanzibar. In line with Vision 2020, the Government also committed itself to achieving the Millennium Development Goals and Education for All (EFA).

In 2002, a first Zanzibar Poverty Reduction Plan was adopted, followed by Mkakati wa Kukuza Uchumi na Kupunguza. Umasikini Zanzibar I (MKUZA I: 2007–2010) and the most recent MKUZA II (2010–2015). One of the goals of MKUZA II is to ensure equitable access to high-quality education. The Government is now developing the next MKUZA phase.

The Zanzibar Education Policy (2006) was developed within the overall context of Vision 2020 and MKUZA II. As a holistic plan, it focuses on the introduction of early childhood care and on the development of primary, secondary and higher education.

Soon after the Education Policy, the ZEDP 2008/9–2015/16 was developed as the first comprehensive and sector-wide approach to the educational challenges facing Zanzibar. Going into more detail than the 2006 Policy, it identifies, establishes and plans for substantial targets for the education system, both in terms of equitable access and quality. The ZEDP seeks to develop immediate, medium-term and longer-term goals for education which are achievable and sustainable. A participatory process was used to develop the ZEDP, drawing on local expertise and international best practice.

With the ZEDP programme period coming to an end, the MoEVT is initiating the process of developing a new education sector plan for 2016–2020. This new plan will be the output of a consultative approach, and in this regard the MoEVT intends to hold an ELAB. The ELAB will be an intensive exercise for stakeholders to work together in reviewing past progress, issues and priorities, and in identifying strategies for the future.

1.1.2 Objective of this situation analysis

This situation analysis sets out to review the whole sector, as a key piece of evidence to inform discussions at the ELAB. The report aims to set out the current context and recent trends to the highest level of detail possible within the short timeframe of analysis. Key issues and successes are highlighted, which the participants at the ELAB will be able to use to develop recommendations and strategies for improvement.

Separately, the MoEVT has commissioned a team to review progress made against the ZEDP 2008/9–2015/16. The ZEDP review was conducted at the same time as the situation analysis, and looked at the progress of implementation against 103 identified targets in the ZEDP. It is intended that the ZEDP review and the situation analysis will both be used as evidence to inform the ELAB.

1.1.3 Study methodology and scope

The situation analysis was conducted by Oxford Policy Management and involved a small team of international consultants and members of the MoEVT’s DPPR. The work was guided by the terms of reference for the study (See Annex A) and by the Framework for Situation Analysis developed by UNESCO, UNICEF, and the World Bank for GPE.\(^3\) The analysis draws on secondary data, largely provided by institutions under the Ministry and other stakeholders, and the comprehensive research studies, many of which were commissioned by the MoEVT. While we found a wealth of data, and opportunities for triangulation, there were often inconsistencies between sources. Where these differences were material to the implications and conclusions, we tried to reconcile them, but

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otherwise we have not tried to resolve all the minor variations. The analysis team also conducted extensive key informant interviews – meeting over 100 staff from many departments, units and semi-autonomous bodies in the MoEVT, as well as a selection from development partners and other ministries (see Annex B for a list of people met). A small number of field visits were made to government-run education institutions, over a period of two months in October and November 2015. It should be noted that while the methodology for this study aimed at being rigorous and comprehensive, issues had to be prioritised due to the resources available. In addition, while every effort was made to meet with the key stakeholders, there were necessarily some few important officials and stakeholders we were unable to meet.

Education as a sector encompasses some government activities overseen by other ministries (such as tertiary education institutions). Where possible, reference is made to these, but on the whole this report focuses on the activities under the purview of the MoEVT.

1.1.4 Structure of the report

The rest of the report is structured as follows. This chapter continues with the background, and big picture context within which the education sector is located. First, the social and demographic contexts of the population of Zanzibar are described. Next, the macroeconomic and public finance contexts are described, looking at the resources which have been made available for education in the recent past.

Chapter 2 looks at issues of access in primary and secondary education, drawing on the Ministry's EMIS data, population data and studies. This chapter sets out intake rates and enrolment, flow rates, completion rates and internal efficiency, as well as issues of OOSC.

An overview of the financing of the sector is covered in Chapter 3, looking at the trends in spending of the Ministry, where resources are allocated in terms of types of spending, and how far this education is prioritised at the national level. Execution rates are analysed in order to assess how much of the original budgets is made available for the Ministry to spend and implement. There is some analysis of household contributions to education, and consideration of how school incomes will be affected by the removal of voluntary contributions.

Chapter 4 goes into more detail on the Ministry's spending. Spending is presented for different departments, and subsectors, as well as looking at the contribution of development projects. Unit costs are estimated, in terms of average spending by the Ministry on students by subsector level, and by looking at the actual costs of major components of education activities.

Chapter 5 focuses on learning outcomes, reviewing the results and limitations of the range of learning assessments conducted in Zanzibar.

Teachers and classroom infrastructure are discussed in Chapter 6. The first section looks at the supply of teachers from the different institutions preparing them and the likely demand for those teachers under two scenarios. This is followed by a discussion of teacher recruitment and deployment modalities, and concludes with an examination of efficiency of teacher use in the classroom and teacher motivation. The second section looks at classroom availability and future demand under two scenarios.

Chapter 7 looks at the structure of the system from two perspectives: central Ministry level and school level through REOs and DEOs. The different departments, units, and semi and autonomous agencies of the MoEVT are described, and the functions of some discussed. At school level the roles and activities of head teachers, teachers and communities are described and the different functions of DEOs and REOs discussed.
Equity is the topic of Chapter 8. It examines equality in learning achievement, access to and resourcing of education at all levels. Gender inequalities are explored, as well as barriers of geography, income and disabilities.

ECD is the focus of Chapter 9. The main providers of ECE in Zanzibar are set out and their challenges analysed. In particular, the consequences of a rapid expansion of enrolment in pre-primary schools is looked at, with the subsector facing challenges around infrastructure, materials and particularly supplying enough appropriately trained teachers.

Tertiary education is the focus of Chapter 10. This looks at recent developments in the tertiary sector, including tertiary institutions within other Ministries, and calculates enrolment numbers overall. Entry-level qualifications to universities and the recent trends are examined. ZHELB's role and financial impact are discussed and three repayment scenarios examined. The chapter then focuses particular attention on SUZA. Overall and unit costs are calculated and discussed.

The situation of adult and continuing education is looked at in Chapter 11. The current levels and progress in literacy rates are discussed, along with the challenges faced by the Government-provided literacy classes. There are also alternative learning classes for children who have never entered school, and pre-vocational skills for young people.

Chapter 12 focuses on TVET. The oversight of the VTA, access to and participation in government training institutions, and the information available on private provision are discussed. The costs of training courses in one VTC are calculated and the low status of training identified.

The final chapter provides a number of conclusions. Successes include the speedy response of the sector to international norms, strides in increasing access to pre-primary, primary and tertiary education, providing a leading model of in-service support to teachers, and overall government commitment to financing education. Challenges are summarised too, including a problem with quality at all levels, dropout/pushout from secondary and its likely impact on tertiary enrolment and employment opportunities, and the gap between policy development and resources to implement intended policies. We note some areas where more information is needed, including the amount of time and experience of teachers in the classroom and the costs and benefits of student loans. The team has been impressed with the positive energy within the sector, and with the commitment to this current situation analysis, the review of ZEDP and the proposed ELAB to chart a future path.

1.2 The social, humanitarian and demographic contexts

1.2.1 Demographic and population indicators

The demographic context of Zanzibar is critical to understanding recent patterns and likely future trends in demand for services. The population of Zanzibar has grown substantially in the last 50 years, trebling from 350,000 in 1967 to 1.3 million in 2012. The average annual growth rate measured by the census is high and increased between the 1970s and 1990s, peaking at 3.1% per year in the 2002 census, and had fallen back to 2.8% by 2012. If the current population growth rate continues, the population will double in the next 24 years, increasing the demand for services in a short space of time.
Of the total population, more than 40% are under the age of 15, meaning a high dependency ratio: in 2012 there were 83 dependents (0–14 and 65+ years) for every 100 people of working age. This also means high pressure on education services, with 32.4% of the population of school-age, according to the 2006 Education Policy (4–15 inclusive). However, this very young population also means a large future workforce. In addition, if fertility rates decline then Zanzibar could experience a demographic dividend, with a large, young labour force and potential for economic growth as the dependency ratio falls.

Population, and population growth, is not evenly spread. In 2012, 46.3% of the population was in urban areas, and 53.7% in rural areas. Urban areas were growing by 4% per year in the decade from 2002 to 2012, whereas rural areas grew by less than 2% each year. Figure 2 shows population by region within Zanzibar, showing clearly that Urban West has the highest population but also the highest annual growth between 2002 and 2012. This region's population will double in just 16 years at this rate. Unguja North is also growing fast, with an average annual increase of 3.2%, but is relatively small and only accounted for 14% of the population in 2012. The regions of Pemba are growing much more slowly than Unguja. This means while Zanzibar will have to expand its services, this will be needed more in some regions than others.

The total fertility rate for Zanzibar was 5.1 children per woman in 2010, lower than in the Tanzania mainland, where it is 5.4 (Tanzania Demographic Health Survey (TDHS) 2010). The fertility rate is higher on Pemba (6.4) than Unguja (4.6). In Tanzania as a whole, 56% of women aged between 20 and 24 years had given birth before they had turned 20, although women in Zanzibar have their first child slightly later than women on the mainland (TDHS 2010). In addition, teenage pregnancy is less common in Zanzibar, where 6% of women aged 15–19 years have begun childbearing, compared with 23.5% in mainland Tanzania.
1.2.2 Basic social indicators

It is estimated that 44% of Zanzibaris live below the poverty line (Household Budget Survey – HBS – 2009/10), meaning they could not meet their daily basic needs.

Zanzibar has higher rates of malnutrition in young children than the mainland, with both wasting (low weight for height) and being underweight (low weight for age) in under-fives higher in Zanzibar than in mainland Tanzania. However, fewer children in Zanzibar show stunting (low height for age) than those on the mainland (National Panel Survey 2012/13).

Households in Zanzibar are around twice as likely to have access to safe drinking water as those in mainland Tanzania, with roughly 87% having access whether in the rainy or dry seasons. This access has also been improving over the last few years in Zanzibar.

Malaria is a major public health concern for all Tanzanians, especially for pregnant women and children under age 5. The disease is a leading cause of morbidity and mortality among outpatient and inpatient admissions. It is less so, however, in Zanzibar, with malaria prevalence at less than 1% in the 2011–12 Tanzania HIV & Malaria Indicator Survey. In 2009/10, fever was the main illness for males in Zanzibar (33.8%) and females (30.2%), followed by malaria (21.6% for males and 18.6% for females). Incidents of fever/malaria had dropped by 10.2 percentage points for males and 18.9 percentage points for females since 2004/05 (HBS, 2009/10). In Zanzibar almost 89% of households have at least one mosquito net, and on average households have 2.4 nets, higher than on the mainland, where 1.6 is the average (TDHS, 2010).

AIDS is one of the most serious public health and development challenges in sub-Saharan Africa. According to the 2011–12 Tanzania HIV & Malaria Indicator Survey, 1% of adults aged 15-49 were infected with HIV, the virus that causes AIDS. The same survey found that almost 100% of Zanzibar's population had heard of AIDS. There is widespread knowledge of ways of preventing the spread of HIV, and women are more aware of the methods than men.

The literacy rate for the population aged over 15 years is 82%, but by age group the literacy rate drops as the population gets older (2012 census). For example, 69% of adults aged 55–59 can read, but just 43% of those aged 75–79.
62.5% of the adult population are participating in the labour force (National Panel Survey 2012/13), and unemployment is 4.4%, but is much higher for young people at 17.1% (HBS, 2009/10). Almost a quarter of adults over 15 work in farming and keeping livestock, 16% are self-employed, and 9% are employed by the Government (HBS, 2009/10). Some 19% of adults stay at home (‘housekeeping’) and a further 18% are students (HBS, 2009/10).

1.3 The macroeconomic and public finance contexts

Since 2007, Zanzibar’s economy has grown in real terms by an average of 6.1% each year, bringing real GDP (2007 prices) up from USD 589 million in 2007 to USD 675 million in 2014 (equivalent to TZS 735 billion in 2007 to TZS 2,134 billion in 2014 in nominal prices) (Office of the Chief Government Statistician, 2015). The annual growth rate fluctuated between 4% and 9%, indicating Zanzibar’s vulnerability to external factors such as weather conditions and the global economy. Despite the overall success in growth rates, Zanzibar remains a poor country. In 2014, GDP per capita was USD 939 (TZS 1.5 million). Zanzibar’s economy is dependent on agriculture, trade and tourism. Agriculture includes cash and food crops, livestock, fishing and forestry, and is the major contributor to the economy. In recent years there have been efforts to further improve the tourism and trade industries.

The Government forecast revenue to increase from TZS 445 billion to TZS 930 billion between 2010/11 and 2015/16. The two largest components of revenue are domestic sources (e.g. taxes) within the recurrent revenue, and programme loans and grants from development partners (for development projects). In 2015/16, these loans and grants make up around a third of expected revenue, and in fact the recurrent revenue also includes a portion from development partners (e.g. through general budget support). Zanzibar is therefore highly dependent on external financing for its national budget.

The Government plans a budget that is equal to revenue collection. Compared to GDP, this budgeted national revenue/expenditure fell from 42% of GDP in 2010/11 to 33% of GDP in 2014/15.

**Figure 3:** Budgeted (expected) revenue and expenditure, 2010/11 to 2014/15

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4 However, the National Panel Survey wave 3 for 2012/13 estimated unemployment at 16.5% in Zanzibar, compared with just 2.6% on mainland Tanzania. This higher estimate may be due to a relaxation of the conditions used in defining unemployment in the National Panel Survey, compared with the HBS.
The actual spending of government depends on the eventual revenue, and the estimated revenue is never 100% accurate. Budget execution rates – that is, actual spending as a proportion of what was budgeted – gives an indication of how accurate the estimated budgets are and the level of funds really available. Figure 4 shows that the total actual spending has varied between 85% and 99% of the budget in the last five years (note that the low rate in 2014/15 may be due to incomplete spending data for the financial year). The recurrent budget has a higher execution rate – as the Government is usually committed to a large portion of recurrent spending (particularly salaries). Development projects may be seen as more discretionary, and hence the Government has spent somewhere between 60% and 88% of this budget in recent years.

In coming years, the size of the Government's budget will depend on a number of factors: economic growth, the tax regime and capacity to collect tax, and the availability of external funding, depending on the strategies of development partners. In the meantime, the amount which is available for the education sector depends on the priority that RGoZ attaches to education, and how the MoF interprets this as it negotiates annual budgets with the MoEVT.

1.4 Conclusion

This chapter has served as an introduction to this education sector situation analysis. To put the education sector into the wider context of Zanzibar, we have seen that one of the major factors affecting education services is population. While the population trebled in the 45 years to 2012, at current growth rates it will double again in just 24 years. This growth is uneven – with faster increases in Unguja and urban areas. As such, it will have huge and varying implications for the future demand for education services in different areas. The high age dependency ratio, and in particular the high proportion of the population of school-going age, puts pressure on demand for schooling. However, as this youthful population ages, Zanzibar may experience a demographic dividend, as more young adults entering the labour force will have completed basic education.

Economic growth has been relatively strong in recent years but is vulnerable to external shocks. In 2014, GDP per capita was USD 939, and around 44% of the population is estimated to be living in
poverty. With GDP growing, the Government’s expected revenue – and therefore budget – increased in absolute terms over the period 2010/11 to 2015/16. However, revenue and budget as a proportion of GDP fell over the period, from 42% in 2010/11 to 33% in 2014/15. Total actual spending has varied between 85% and 99% of the planned budget in the last five years.

The following chapters of this report cover a number of themes and all the major subsectors of education which fall under the remit of the MoEVT. As far as possible the report is comprehensive, clear, and based on existing research, supported by insights from a number of field visits and key informant interviews.
2 Enrolment, internal efficiency and OOSC

Box 2: Key findings on enrolment, internal efficiency and OOSC

Structure of the system

- The education system is in a period of transition to the 12 years of compulsory basic education stipulated in the 2006 Education Policy. The last cohort studying under the older system will move to Form 1, the start of ordinary secondary education, in 2016 (as part of a double-cohort).

Enrolment capacity (GERs)

- The pre-primary system is the only school subsector which has been expanding capacity to enrol the eligible population in the past six years. Enrolment almost doubled, with growth concentrated in public schools. Current capacity is between 33% and 50% of the eligible population.
- The primary system continues to have sufficient places to enrol the eligible population, although not at policy norms for class sizes because of acute classroom shortages. Enrolment growth has kept pace with population growth.
- At ordinary secondary level, GERs have fallen slightly over the past six years. The system currently accommodates 65% of the eligible population, but there are classroom shortages which will become acute as a double-cohort enters Form 1 in 2016.
- The GER at advanced secondary (Forms 5 and 6) has been on a downwards trajectory since 2009 and is now at around 5%. This is partly explained by an increasing trend for Form 4 students who qualify for Form 5 to opt to enter colleges instead.
- Places in the three public TVET institutions are equivalent to 0.5% of secondary school places, so public provision is very limited. The limited data available on private provision from the VTA estimates that private enrolment is at least four times as high as public enrolment.
- MoEVET tertiary institutions in Zanzibar are rapidly increasing capacity. They provide places for 525 students per 100,000 inhabitants, up from 403 in 2009. Taking account of all tertiary students (in Zanzibar, the mainland and abroad), this rises to 794 tertiary students per 100,000 inhabitants.

Schooling coverage: proportion of population with access to education

- More than 40% of Standard 1 children report having attended pre-primary education.
- Almost all children enter primary school at some point, most (89%) reach the final Standard, and almost all students in the final grade transition to ordinary secondary level.
- Access to ordinary secondary education falls by half over the four-year cycle (from 86% to 43%), mainly because many students fail the Form 2 selective examination. This means that considerably less than half of children have access to the final form of ordinary secondary. The system is still in transition, from a policy where compulsory basic education ended at Form 2 to the current policy, which applies to the cohort of students who are entering Form 1 in 2016.
- Access to advanced secondary or college education is about 6%, so the system narrows markedly at this point.

Retention, dropout and internal efficiency

- Retention in the primary cycle is reasonably good.
- Retention is a huge problem in the secondary cycle. Most students leave the system between Forms 2 and 3 and Forms 4 and 5, the stages where standardised testing takes place.
- Apart from the pushout of students from the system induced by standardised testing, a mixture of supply- and demand-side factors are reported to contribute to dropout levels. These include a lack of interest in schooling, being over-age, and economic factors.
- Repetition rates are low in both the primary and secondary cycles, but they are relatively high in Standard 1, which is costly and unlikely to be an effective way of supporting weaker students to reach learning standards. Children without pre-schooling are likely to be particularly vulnerable to the risk of early repetition.

OOSC

- About 15% of primary-aged children were out of school in 2010. This translates to about 37,000 children in 2014, assuming the rate has remained constant. Most of these children (25,000) can be expected to enter the system later, highlighting the problem of over-age students.
2.1 Overview of education system

The education system is in a period of transition to the structure summarised in Figure 5, as stipulated in the 2006 Education Policy (MoEVT, 2006). The compulsory phase comprises two years of pre-primary, six years of primary and four years of ordinary secondary, making 12 years of basic education in total. The other elements of the system are: two years of advanced secondary, technical and vocational education (TVET) courses (targeted at two groups of ordinary secondary leavers – Form 2 and Form 4), higher education, adult and alternative learning programmes. There is a mix of public and private provision at all levels.

The current system is partway through the transition and there are some practical and analytical implications of this. At pre-primary level, while an increasing number of public (government-run) schools are offering pre-primary classes under the two-year arrangement, many of the dominant private operators are still offering three years for four to six year olds. This contributes to the late entry of pupils into primary school at seven years or above (Statistical Abstract 2013, p. 35). This also means that assessing access to pre-primary education using standard indicators which compare enrolment with population is not straightforward.

The change in the length of the primary cycle from seven to six years was accompanied by a revised curriculum and a change in the language of instruction from Kiswahili to English in Standards 5 and 6. The aim of this change is to strengthen the English language skills needed for secondary education, where it is the medium of instruction. The first group of students to study the new curriculum are currently in Standard 6, while the last group of students who went through the previous system are in Standard 7. Both groups have taken an examination in 2015 marking the end of the primary cycle, and this double-cohort will transition to ordinary secondary in 2016. From an analytical perspective, this means that there are still seven year-groups of students in the primary system up until 2015, so access indicators which compare enrolment and population need to take account of this.

Under the new structure, four years of ordinary secondary education is compulsory, but transition takes time. In practice, there are cohorts of students still going through the system under the previous policy, where compulsory basic education ended at Form 2 with a selection examination for further study. Many students currently fail the Form 2 examination and are not able to continue to Form 3 (see Chapter 5 for details on the current purpose and nature of this examination). The first cohort of students who are following the new policy will enter Form 1 in 2016.

The other elements of the system are largely unchanged from the pre-2006 structure.

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5 The MoEVT has produced two statistical abstracts using data from the EMIS system. The latest (unpublished) is the Statistical Abstract 2014, covering data up to 2014. The previous publication is the Statistical Abstract 2013.
Figure 5: The structure of the Zanzibar education system
Structure stipulated by the Education Policy (2006)

Compulsory Education

Pre-Primary (Age 4-5)

- Year 1
- Year 2

Primary (Age 6 – 11)

- Standard 1
- Standard 2
- Standard 3
- Standard 4
- Standard 5
- Standard 6

Ordinary Secondary (Age 12 – 15)

- Form 1
- Form 2
- Form 3
- Form 4

Advanced Secondary (Age 16-17)

- Form 5
- Form 6

Higher Education (Age 18+)

- 3 years + Undergraduate
- Masters
- PhD

Language of instruction: Kiswahili

English

Adult Education Programmes

TVET Courses

- VTC 1
- VTC 2
- VTC 3

TVET Courses

- NTA 1
- NTA 2
- NTA 3

VETA Examination

FTC Examination

Source: Educational Statistical Abstract 2013 (MoEVT, 2014)
2.2 Evolution of enrolment and education system enrolment capacity

2.2.1 Enrolment trends

Trends in student numbers in the sector over the past six years are given in Table 1. Enrolment growth has varied a lot depending on the subsector. The size of both the pre-primary and tertiary subsectors has increased substantially, while primary and ordinary secondary displayed more modest growth. By contrast the number of students in advanced secondary declined substantially with numbers falling by an average of nearly 10% per year. The public TVET sector is small (three institutions) and here enrolment has grown slightly over the period.

Private sector provision dominates at pre-primary and tertiary level, while it accounts for between 8% and 10% at primary and secondary levels, but there have been some shifts in this balance.

Enrolment growth has been strongest at pre-primary at 12% per year on average, almost doubling student numbers, from 21,000 to 42,000, over the six years. Growth has been particularly strong among public providers, in line with government policy for primary schools to open pre-primary classes. The share of private provision in this subsector dropped from 79% to 55% in 2015.

At primary level, student numbers have been increasing steadily by almost 3% each year. The private sector's share of enrolment has grown modestly, from 5% to 8%, over the six years. The private share has crept up similarly at ordinary secondary level, which experienced slightly lower growth in student numbers, at just over 1% per year on average.

Table 1: Enrolment trends by level and type of provider, 2009–2015

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Number of students</th>
<th>Average annual growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share private (%)</td>
<td>78.9</td>
<td>58.2</td>
</tr>
<tr>
<td>Primary</td>
<td>220,819</td>
<td>237,690</td>
</tr>
<tr>
<td>Share private (%)</td>
<td>5.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Ordinary secondary</td>
<td>77,958</td>
<td>77,671</td>
</tr>
<tr>
<td>Share private (%)</td>
<td>5.5</td>
<td>7.3</td>
</tr>
<tr>
<td>Advanced secondary</td>
<td>4,844</td>
<td>4,182</td>
</tr>
<tr>
<td>Share private (%)</td>
<td>12.7</td>
<td>12.3</td>
</tr>
<tr>
<td>TVET (public only)²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share private (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Tertiary²</td>
<td>4,841</td>
<td>4,252</td>
</tr>
<tr>
<td>Share private (%)</td>
<td>57.5</td>
<td>68.2</td>
</tr>
</tbody>
</table>

Source: EMIS/Statistical Abstracts 2014 and 2013/Budget speech tables, various years.

Notes: (1) KIST has been included under Tertiary. (2) Average annual growth is computed from 2010 to 2015. (3) These figures exclude the two 'biased' government secondary schools which offer technical education (see Chapter 12). (4) Zanzibari students studying at tertiary institutions on the mainland or abroad are not included; estimates put these figures at approximately 1,600 (see Chapter 10). Students studying at post-secondary colleges which are not under the MoEVT are also excluded because trend data is not available; estimates put these figures at approximately 1,600 (see Chapter 10).
The rapid fall in student numbers at advanced secondary level is partly related to the large overall decline in the pass rate in the Form 4 examination seen since 2009, and in particular the proportion of students who meet the qualifying grades for Form 5. There has also been a lot of volatility in the pass rate, and this has translated into fluctuations in absolute student numbers in advanced secondary. There is also another explanation for declining Form 5 enrolment. Some students who qualify for Form 5 are instead choosing to enter colleges where they study for a one-year certificate followed by a two-year diploma. A diploma is a higher level of qualification than A-levels, the qualification obtained at the end of Form 6. The students who opt for college are included in the tertiary figures above and it has not been possible to separate them out.

The fluctuations in enrolment at advanced secondary level must make it difficult to use resources assigned to this level efficiently in the short-run, especially teachers and perhaps classrooms (see Chapter 6 for further discussion). Whether there is a trend towards college enrolment based on student preferences merits further investigation, as this needs to be taken into account in future planning for the sector to limit the risk of underutilising existing school resources.

2.2.2 Enrolment capacity of the schooling system

In order to assess the capacity of the schooling system to provide places for the eligible population in pre-primary, primary and secondary education at current resource ratios (class sizes, student to classroom and student to teacher ratios), the GER is a good indicator. This compares the number of students enrolled with the number of children in the eligible population. It is important to distinguish the concept of enrolment capacity with schooling coverage (discussed in the next section). Schooling coverage is the share of the school-age population with access to education, and the GER is not usually a good measure of this because it includes students of all ages as well as repeaters. Repeaters inflate the rate from the perspective of coverage because, for example, a student who finishes seven years of primary but repeats twice will be included in the GER for nine years. Under- and over-age children are less problematic in seeking to measure access, since the main thing that matters for measurement is that they attend school at some point.

In Zanzibar, repetition rates across the schooling system are fairly low (see section 2.5), with the exception of some grades, so the GERs discussed below are not that far above access rates, especially taking into account the fact that some may be slightly underestimated (see technical discussion in Box 3 below).

Enrolment capacity (termed ‘physical capacity’ in the GPE Education Sector Analysis (ESA) guidelines, p. 75) is the ability of the system to enrol eligible children under current resource ratios. So in reality if class sizes, for example, are much higher than policy norms then the system’s resources are over-utilised, probably compromising quality. On the flip side, if class sizes are lower than policy norms then the system’s resources are underutilised, with consequences for efficiency.

The trends in GERs in Figure 6 reveal that it is only the pre-primary system which has been expanding its capacity to enrol the eligible population in recent years, although class sizes are larger than policy norms. By 2015, capacity had reached around one-third of four to six year olds. If the system was catering only for two population age groups, as per the policy, then the current system would have capacity for almost 50% of eligible children.

The primary GER has been hovering at around 100% over the past seven years, which indicates that the primary system has sufficient places to enrol the eligible population, although class sizes are well above policy norms. At ordinary secondary level, the shallow downward sloping GER line in Figure 6 means that enrolment capacity has fallen slightly since 2009. In 2015 the system accommodated 65% of the eligible population.
Enrolment capacity at advanced secondary level has also been on a downward trajectory since 2009. This subsector accommodated less than 10% of the relevant population at the start of the period and it has fallen nearly every year since then. In recent years, advanced secondary enrolment has been falling in absolute terms, and by 2015 the GER was around 5%. This statistic needs some qualification however, because over this period it appears that an increasing number of students who qualify for advanced secondary schooling are opting for college education. As noted above, it is possible that this is leading to resource ratios in advanced secondary classes that are below policy norms; it is important that this is investigated further, given resource shortages at other levels.

**Figure 6:** Trends in GERs by subsector, 2009–2015

The GER estimates discussed above are not identical to those published elsewhere. Box 3 discusses some of these differences and offers some possible explanations. Overall the discrepancies at primary and secondary level imply that GERs are probably underestimated by around five to seven percentage points. The most likely explanation for this is that the EMIS system is not fully capturing student enrolment. Alternative sources covering pre-primary are scant, so GER estimates at this level should be treated with some caution.
Box 3: Comparison of GER estimates from different sources

MoEVT Statistical Abstract
The GERs presented above are slightly different to those shown in the MoEVT’s Statistical Abstract publications (see Statistical Abstract 2013, p. 4). This is simply due to differences in estimates of the school-age population (the denominator of the calculations). The MoEVT’s Abstract uses projected population figures from the 2002 census which, as the text of the Abstract 2013 notes, appear to be underestimated based on 2012 census figures. In the absence of official projections from the 2012 census, this report has used a method recommended in the GPE ESA guidelines (GPE et al., 2014, Annex 1.1) to produce adjusted and smoothed single-age population estimates (see Annex C for details).

Population census
The 2012 population census found a primary GER of 105% compared with 100% for the same year reported in Figure 6 above. The difference is entirely driven by the census counting 5% more pupils in primary school than the MoEVT’s routine EMIS. One possible reason for this discrepancy is incomplete coverage of the private sector by EMIS, which is noted in the section on data quality in the Statistical Abstract 2013 (Annex 1). The timing of the census compared with the EMIS data collection (March) may also be a factor.

Household surveys
The 2010 TDHS puts the gross attendance rate for primary at 105%, and for secondary (ordinary and advanced combined) at 58% (World Bank TDHS 2010 calculations). The 2010 GER figures in this report are 99% (primary) and 51% (secondary combined).

Taken together with the 2012 census results, this evidence suggests that the primary GER is likely to be underestimated by about five percentage points. At secondary level, the GER may well also be underestimated. The discrepancy with the TDHS is about seven percentage points. One possible reason is that the timing of the EMIS data collection (March) is sometimes too early for confirmation of enrolment in Form 5 (Statistical Abstract 2013, Annex 1), presumably resulting in underestimated student numbers, but this seems unlikely to be the full explanation.

Capacity in the non-school subsectors is very small compared with secondary school capacity, showing how much provision narrows outside the school system. Enrolment in the three public TVET institutions is equivalent to 0.5% of secondary school enrolment and this has changed little over the past six years. The number of places in private TVET courses is not systematically reported, but the VTA estimates this is at least 2,000 students, four times as many as in public institutions, corresponding to about 2% of secondary enrolment.

Tertiary institutions in Zanzibar are rapidly increasing capacity. Excluding students who are studying in colleges which are not under the purview of the MoEVT, these institutions provided places for 525 students per 100,000 inhabitants in 2015, up from 403 students per 100,000 inhabitants in 2009. When students in non-MoEVT colleges and tertiary students studying on the mainland and abroad are included, the total tertiary enrolment figure rises to an estimated 10,941, equivalent to 794 students per 100,000 inhabitants in 2014 (see Chapter 10 for more details).

2.3 Schooling coverage

Does the schooling system reach all children? For every cohort of children who reach school age, if the system stays as it is, what proportion are expected to access pre-primary, each grade of primary and secondary school, and to reach tertiary studies? The education pyramid in Figure 7 gives a simplified picture of schooling coverage and dropout, based on a snapshot of the system in 2014. It visualises the access rate for a cohort at the entry and exit of each cycle (primary, ordinary secondary, and advanced secondary), and the transition rate between each cycle.

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6 This analysis is not concerned with whether children are over- or under-age, but whether they have access at any age.
Figure 7: Education pyramid for Zanzibar 2014

Source: EMIS; Statistical Abstract 2014; Census 2012 and author single-age projections (see Annex C).

Notes: (i) Standard UNESCO definitions of access rates and transition rates between cycles have been used (See Annex D). (ii) Transition rates between cycles 2013 to 2014 are shown explicitly in the pyramid for public students only. Private transition is estimated based on the share of private enrolment at each level. (iii) The transition rate from Form 4 to College assumes that all students who qualify for Form 5 based on their Form 4 examination results but do not enrol in Form 5 do enrol in college.

Almost all children enter primary school. The access rate is estimated at 99% in Figure 7. This does not mean that all children enter primary school at the official age, but that almost all children enter eventually. Results from the 2010 DHS for Zanzibar (World Bank tabulations) are consistent with this picture. These show the proportion of children by age who have ever entered school rising rapidly from 14% of six year olds to 61% of seven year olds, then steadily increasing to 98% of 11 year olds, before levelling off as children become too old to enter school for the first time. It is also clear from these figures that late entry to school is common, which is a concern at the very least because being over-age is associated with a greater likelihood of dropping out.

Some 44% of Standard 1 students in 2014 reported having attended pre-primary classes, up from 37% two years earlier (Statistical Abstract 2014). Taken together with the finding that access to primary is near universal, this implies that the system is providing access to pre-schooling to well over 40% of children.7

It is clear from the education pyramid that retention is very problematic from ordinary secondary level upwards. Access rates to Form 1 are still fairly high at 86%, but by Form 4 this has dropped by half to 43%. In other words, considerably less than half of children have access to the final form of ordinary secondary education. This reflects the fact that the system is in transition to the 2006 policy. Current student cohorts are still following the previous policy of compulsory basic education to Form 2, with a requirement to pass a selection examination in order to qualify for Form 3. The first student cohort to follow the new policy of compulsory basic education to Form 4 will enter Form 1 in 2016. The expectation is that the education pyramid will change markedly in the next few

7 Note that the pre-primary GER is estimated at 33% using four to six year olds as the denominator, and 50% using four to five year olds as the denominator. Provision is a mix of two- and three-year courses, currently reflecting a system in transition.
years with a much higher proportion of children completing 12 years of basic education. Nonetheless, the current situation is that many students are missing out on the second phase of ordinary secondary education, with the risk that they leave school without the skills and knowledge that will enable them to be successful in their future lives and contribute to society.

While the transition rate from primary to ordinary secondary is high, at 96% (for public students), the transition rate from ordinary to advanced secondary is dismal, resulting in extremely low coverage at the highest level of schooling. Only 6% of Form 4 public students made the transition to Form 5 in 2014 – the lowest flow rate of students for several years. This transition rate between the secondary cycles is very erratic over time – it was 22% in 2010. This may be partly a reflection of unreliable enrolment data (see final paragraph in Box 3 on this issue), but volatility in Form 4 examination pass rates is a major factor.

A further 6% of Form 4 public students made the transition to college rather than to Form 5 (assuming that all students who qualify for Form 5 make one of these choices). This is an estimate and it would be very useful to carry out further research to find out if this estimate is accurate, based on data from tertiary institutions, and also to find out why students are choosing this path.

Overall, the access rate to advanced secondary and colleges is about 6% in 2014, down from about 8% in 2010. The vast majority of children have no access to advanced secondary education.

It is useful to look within each schooling cycle (excluding college entry because data is not readily available) to see where most students leave the system. Figure 8 illustrates the retention profiles for the primary and secondary cycles at two points in time, 2010 and 2014. Each profile shows the survival rate in each grade within the cycle from an entry cohort of students.

The contrast between the profile of the primary and secondary cycles is immediately striking. Retention in the primary cycle is reasonably good, while retention in the secondary cycle is dramatically low, due mainly to selection examinations.

The survival rate to the end of primary school is 84% in 2014, which means that of every 100 children entering Standard 1, if the system remains the same, 84 will reach Standard 7 and 16 will drop out. Standard 6 has the highest dropout rate, at 7%, compared with less than 3% for other standards. The primary retention profile was similar in 2010.8

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8 In the education pyramid above (Figure 3), the Standard 7 access rate (a proxy for the primary completion rate) was estimated at 89%. This suggests that primary survival rates may have been slightly higher in the past.
Retention is a huge problem in the secondary cycle. Figure 8 reveals that most students leave the system between Forms 2 and 3, which marks the end of compulsory basic education under the previous policy, and between Forms 4 and 5. Standardised testing takes place at both of these transition points. Students’ performance in the Form 2 and Form 4 examinations determine whether they can continue to the next Form. The analysis of student learning later in this report (Chapter 5) finds that most exits of students between Forms 2 and 3 are explained by poor Form 2 examination performance. Similarly, the exit of students between Forms 4 and 5 is clearly related to examination performance, but the drop shown in Figure 8 above would be marginally less severe if students who enter college after Form 4 were included.

Survival rates have worsened in the advanced part of the secondary cycle between 2010 and 2014, but this is partly because an increasing proportion of students are opting for college. If the system remains in a steady state at its 2014 flow rates then for every 100 students entering secondary school, 50 will reach Form 4 and three will get to Form 6 (and approximately three to college); in 2010 comparable figures were 47 students reaching Form 4 and nine getting to Form 6 (and one to college).9

Looking across both primary and secondary cycles in 2014, school life expectancy (the average number of schooling years a typical child may hope to complete, excluding repeated years), is about nine years. This has not changed much since 2010 (it has fallen by 0.3 years).

### 2.4 Access and retention: supply and demand factors

A mix of demand- and supply-side factors contributes to students dropping out of school in Zanzibar. As part of the HBS (2009/10), children aged 7–16 years who had dropped out of school were asked for the main reason. By far the most common response from this representative group of dropouts was they were ‘uninterested’ (61%), followed by age-related reasons (either too young, 6%, or too old, 9%), then economic reasons (failed to pay contributions, 4%, working at home, 4%). This survey also reported that the vast majority of households are within 2.9 km of a primary

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9 The figures for students surviving to college are estimated (see footnote to Figure 7).
school (97%) and a secondary school (86%). In fact, most households are within 1 km of a primary school (66%) and secondary school (61%), and so distance to school seems unlikely to play a major role in dropout rates.

Overall then, if students’ lack of interest in schooling is primarily related to the quality of services being delivered then supply-side factors are clearly important drivers of dropout rates. On the demand-side, being the wrong age (especially being over-age – a well-documented feature of the system, see Statistical Abstract 2013, pp. 9–10) as well as coming from a poor family appear to be the main barriers.

A recent survey (2014) of 21 primary and secondary schools, as part of preparations for the forthcoming World Bank project Zanzibar Improving Student Prospects (ZISP), asked 61 teachers to give their main reason why students drop out. The findings are not reported here in detail because the findings are not generalisable to Zanzibar overall, but they again combine a mixture of demand and supply factors. It is worth mentioning that 7% of teachers cited sexual abuse as the main factor driving secondary students out of school. Clearly reports such as these merit urgent attention to determine if this is an isolated issue or a more systemic one.

Zanzibar’s EFA assessment (MoEVT 2014a, p. 57) provides case study evidence that the introduction of alternative forms of discipline in schools, in place of corporal punishment, has had a positive effect in attracting children back to school who had previously dropped out. It is difficult to measure the extent and severity of violence against children, but a government/UNICEF study from 2009 (also reported in the EFA report p. 165) found that the majority of girls and boys under 18 years have experienced some type of physical violence.

A systematic study on children who are excluded from school in Zanzibar, including those who have dropped out, is currently under preparation as part of the UNICEF/UNESCO Institute of Statistics global initiative on OOSC. This report is timely and will provide a more in-depth analysis of barriers facing different groups of excluded children; it should be of help in the designing of appropriate interventions to help these children.

It is important to note that the evidence discussed above ignores the major factor which drives students out of the secondary system, namely selection examinations at Form 2 and Form 4. This is discussed in greater detail in Chapter 5.

2.5 Internal efficiency

High repetition rates affect the internal efficiency of education systems mainly because of the cost of the extra years that repeaters spend in school. There is also little evidence to suggest that repetition is typically beneficial to students in terms of substantially improved learning outcomes if they simply repeat the same year under similar conditions (GPE et al., 2014, p. 102). With this in mind, it is encouraging to find that in Zanzibar repetition rates are low overall at about 3% in the primary cycle and 2% in the secondary cycle.

In terms of repetition rates for individual grades in both cycles, Figure 9 illustrates that there is considerable variation. At primary level, repetition is far higher in Standard 1 (at 7%) than in any other Standard. During a school visit to a primary school in North B district, the head teacher mentioned that the students in Standard 1 who have not had any pre-primary education find the

10 A random sample of 10 primary and 11 secondary schools was drawn from a sampling frame which included all primary schools with more than 60 students in Standard 6 or all secondary schools with more than 60 students in Form 4.

11 See http://allinschool.org/ for more details.
curriculum especially difficult. To manage this situation, students are split into classes on the basis of pre-school attendance. It may be that a lack of school readiness is contributing to the comparatively high Standard 1 repetition rate: about 60% of Standard 1 students have had no exposure to pre-primary education.

In the secondary cycle, peak rates of repetition are in Form 1, at around 4% in 2014. The first high-stakes standardised examination in the secondary cycle is in Form 2, and so perhaps schools – or parents – keep back a small proportion of the weakest students to give them a better chance of passing the examination the following year. The pattern of comparatively higher repetition rates is visible in the grades before the four standardised examinations at Standard 7, Form 2, Form 4 and Form 6.

**Figure 9: Repetition rates (public schools) 2010 and 2014 (%)**

![Repetition rates (public schools) 2010 and 2014 (%)](image)

Source: EMIS.

Apart from repetition, the other factor which contributes to internal inefficiency is dropout. If students drop out before they reach the end of the cycle then neither they nor the system collectively reap the intended benefits. It is evident from the retention profile in Figure 8 shown earlier that dropout rates are moderate at primary level (about 16% over the cycle), but a very high proportion of secondary students leave the system before the end of each sub-cycle (about 50% over the ordinary secondary cycle, and about 97% over the whole secondary cycle to the end of advanced secondary).

Summary indicators of internal efficiency are given in Table 2. The coefficient of efficiency simply compares the ideal number of years (i.e. in the absence of repetition and dropout) to produce graduates with the actual number of years needed to produce graduates (including the years spent on repetition and dropout) given the current system.

The primary cycle is relatively efficient (87%) because of its low repetition rates and moderate dropout levels. The internal efficiency of the primary cycle has remained stable over time on the evidence of these two snapshots of the system. By contrast, the ordinary secondary cycle is much less efficient (68%) and therefore costly in terms of producing ‘graduates’ (where a graduate is defined as a student reaching Form 4, not as a student passing the Form 4 examination). This is almost entirely due to the large exodus of students between Form 2 and Form 3, following completion of basic education (as defined by the pre-2006 policy). Internal efficiency at ordinary secondary appears to have improved slightly over time.
Table 2: Internal efficiency indicators, 2010 and 2014

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Ordinary Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2014</td>
</tr>
<tr>
<td>Coefficient of efficiency (%)</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>2014</td>
</tr>
<tr>
<td>Years input per graduate</td>
<td>8.1</td>
<td>8.1</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>2014</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>6.2</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Source: EMIS. Note: (i) These statistics were calculated using a reconstructed cohort analysis using data from 2009 and 2010, and from 2013 and 2014. (ii) The calculations are based on Standard UNESCO definitions (see Annex D). The years input per graduate takes account of all the additional years in the system by repeaters and by students who drop out.

### 2.6 OOSC

It is important to understand the scale of exclusion of school-aged children from the formal schooling system in Zanzibar. A further issue is whether children who are currently excluded have already dropped out of the system or are likely to enter late or, of most concern, to never enter. This information can help to inform policy responses to mitigate exclusion since these different groups of children most likely have different needs.

About 15% of primary school-age children are out of school, according to household survey data from 2010 (Table 3). Assuming that the situation is similar in 2014, this implies that about 37,000 children of primary school age are currently excluded.

#### Table 3: Proportion and number of OOSC of primary and secondary age

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>7–13 years</td>
<td>15</td>
<td>253,742</td>
<td>36,833</td>
</tr>
<tr>
<td>Secondary (ordinary and advanced)</td>
<td>14–19 years</td>
<td>31</td>
<td>182,835</td>
<td>57,540</td>
</tr>
</tbody>
</table>

Sources: (i) Proportion of OOSC is estimated from the TDHS 2010 (World Bank Zanzibar tables); (ii) estimated population 2014 is from author projections from the 2012 census (see Annex C). Note: (1) The age ranges for primary and secondary are those under the pre-2006 policy because the system is still in transition (see section 2.1 earlier). (2) This calculation assumes that the 2010 rates of OOSC apply in 2014. (3) Children of primary school age are counted as being out of school if they are not attending primary school. (4) The TDHS tables available do not separate out the compulsory four-year ordinary cycle from the full six years. So the labelling of young people aged 18 and 19 as out of school is not strictly accurate. (5) Young people of secondary school age are counted as being out of school if they are not attending primary, secondary or post-secondary education.

Exclusion is higher at secondary level, where 31% of young people aged 14 to 19 years are not in formal primary, secondary or post-secondary education (see Table 3 above). This translates to an estimated 58,000 young people. As only the first four years of secondary education are intended to be compulsory some of these 'out-of-school' young people are of an age where schooling is optional.

Most children of primary age who are out of school can be expected to enter the system later, when they are over-age, according to Figure 10. An estimated 25,000 children out of the 37,000 currently excluded children fall into this category. A further 2,000 of the excluded 7–13 year olds have already dropped out, leaving nearly 10,000 children who are expected never to enter the system.
Given the comparatively large group of primary-age children likely to enter the system late, putting in place measures that aim at mitigating over-age enrolment is important. Over-age enrolment can affect demand for schooling, as well as the effective delivery of education and the efficiency of the system. A growing body of international evidence finds that over-age students are more likely to repeat grades and to drop out of school before completing the education cycle, and frequently have lower learning outcomes (UNESCO, 2007). In settings where there are earnings opportunities for older children that raise the opportunity cost of staying in school, over-age children are particularly at risk of dropping out before completing the cycle, more so than their younger counterparts (UNESCO, 2011).

On the delivery side, in schools where there is a combination of age-appropriate and over-age students, the age range within grades becomes wider. This creates pedagogic challenges as all students are subject to the same curriculum regardless of their age-related cognitive development and learning readiness (CREATE 2008).

**Figure 10: OOSC of primary age by past or expected school exposure (estimated 2014)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropped out</td>
<td>6%</td>
<td>2,096 children</td>
</tr>
<tr>
<td>Never expected to enter</td>
<td>27%</td>
<td>9,767 children</td>
</tr>
<tr>
<td>Expected to enter late</td>
<td>68%</td>
<td>24,970 children</td>
</tr>
</tbody>
</table>

Sources: (i) TDHS 2010 (World Bank Zanzibar tables); (ii) author population projections from the 2012 census (see Annex C). Note: (i) Estimates of the proportion of children expected to enter late or never to enter are probabilistic; estimates are based on the behaviour of previous cohorts of children following UNESCO methodology (UNESCO, 2005). (ii) The estimated number of children falling into the three categories assumes that the proportion of OOSC in each category reported in the figure from 2010 applies in 2014.

The individual and household characteristics of the two groups of OOSC are discussed in Chapter 8, which deals with equity in access to schooling.

### 2.7 Conclusion

There has been a good deal of progress in implementing the 2006 education policy on access to schooling (coverage) but some key challenges remain.

It is important to keep up the pace of pre-primary expansion towards the goal of full coverage – a key element of the compulsory 12-year basic education policy. The risk of only partly meeting this objective is that many children enter Standard 1 unprepared for the curriculum, which has been designed on the assumption that children have a pre-primary foundation.

The objective of four years of compulsory ordinary secondary education, as part of the compulsory basic cycle, is not currently being achieved because the first cohort of students that falls under this
policy is due to enter secondary school only in 2016. Currently most children do not reach Form 4 because of their performance in the selective Form 2 examination, as well as other factors contributing to dropout in the primary and secondary cycles. A large proportion of children leave the system after completing Form 2, which marks the end of basic education under the previous policy, or leave after Form 4. To ensure that the cohort following the new policy will be retained in secondary school for four years, at a minimum there will need to be a review of the purpose and nature of the Form 2 examination, as well as steps to mitigate economic barriers to access.

At primary level, late entry to school is a considerable problem and puts children at risk of some of the damaging effects that this can have on learning achievement and retention seen in the international evidence. More understanding of the causes of this phenomenon would help to inform interventions.

An increasing number of Form 4 students who qualify for Form 5 are choosing to study in colleges instead. Some estimated figures are presented in the education pyramid in this chapter, but it would be useful to carry out further research to find out why students are choosing this path and where they are studying. If this trend continues then it will free up resources (teachers and classrooms especially) that could be utilised at ordinary secondary level.
3 Cost and financing overview: government and household contributions

Box 4: Key findings of the cost and financing overview

- MoEVT spending has increased from TZS 59 billion in 2010/11 to TZS 90 billion in 2014/15. In this time, the balance between recurrent and development has shifted towards recurrent, with salaries accounting for 77% of spending in 2014/15, up from 60% in 2010/11. The proportion of spending given to development projects has fallen, and this mostly reflects a reduction in donor funds, which make up 90% of development expenditure.

- For the last decade, the MoEVT’s spending has accounted for around 16–22% of the national budget. At the same time, this spending had a value of 3.8–4.5% of GDP. This means that Zanzibar is meeting international recommendations for prioritising education in national spending (15–20%), but is on the low side in terms of relative actual amount (4–6% of GDP). Again, salaries are the major driver of spending: 38% of the Government's total spending on ministry salaries goes to the MoEVT.

- While salaries are always prioritised and honoured, non-salary recurrent spending is more likely to be squeezed out and not receive its full budget from the MoF. In 2014/15, non-salary spending was only 68% of the original budget.

- It is estimated that households allocate around 2% of their expenditure to education. In 2014 schools received an average of TZS 2,300 per student in primary and TZS 7,500 in secondary from parents.

- The announcement in 2015 to abolish voluntary contributions and government to provide the items needed by schools comes with a number of implementation risks:
  - It leaves schools with no funds for discretionary needs, and no clear guidance on how schools should fund items which government will not pay for, such as utilities.
  - It may mean that there may also be inefficiencies in allocating items across schools, with some receiving more or less than they need.
  - There is a very real problem of the MoF not making the budgeted funds available to the MoEVT. When this happens, the MoEVT will have to prioritise what to buy, but also manage the communication with, and expectations of, parents and schools. There can be a serious impact on the quality of teaching and learning if these items are squeezed out.

3.1 Introduction

This chapter gives a summary overview of spending on education by the MoEVT (including government of Zanzibar and donor funds) and households. The Ministry’s spending is based largely on the rich data of budgets and expenditure held by the MoEVT’s accounts team, in the integrated financial management information system (IFMIS). Using this, spending can be broken down by type (for example, salaries and other expenditure) and compared against the original budgets to determine the execution rates.

In addition to this, information from the MoF and the Office of the Chief Economist is used to put the spending of the MoEVT into the national context, to understand how far Zanzibar prioritises the education sector. Finally, various sources of data (EMIS, sample school surveys, HBS) are used to understand the contribution of households to funding education.

3.2 Overview of MoEVT spending

The Ministry’s budget has been fairly stable in recent years, remaining between TZS 107 million and 115 million between 2011/12 and 2014/15 (Figure 11). Similarly, actual expenditure saw an increase between 2010/11 and 2012/13, but has since fallen marginally. Meanwhile, Zanzibar has experienced inflation of between 5% and 14% annually, suggesting that in real terms the budgets and expenditure have been falling.
Figure 11: MoEVT budget and expenditure, 2010–11 to 2014–15

Source: MoEVT IFMIS; includes on-budget development partner expenditure.

Around two-thirds of the MoEVT’s actual expenditure is allocated to recurrent spending under the Ministry departments (Figure 12A). (See Box 5 for an explanation of the financial reporting and categorisation system.) Recurrent spending includes all salaries and other expenditure to pre-tertiary teachers and schools, and until now also the teacher training colleges (TTCs) (but these will soon move to subvention under SUZA), as well as head office. Subvention – which is given to the semi-autonomous bodies such as Zanzibar Examinations Council (ZEC) and SUZA – generally receives around 15% of MoEVT expenditure. In 2010/11 and 2012/13, development projects received almost 30% of expenditure, but this has since dropped closer to 10%. Development projects are around 90% financed by development partners, either through loans or grants.

Salaries account for a large part of expenditure – previously around 60% of spending but rising to 77% in 2014/15. In actual terms it has risen year on year, from TZS 37 million five years ago to 70 million last year (Figure 12B). Non-salary recurrent spending has also generally increased, from TZS 5 million in 2010/11 to TZS 11 million in 2014/15, or from 8% of total spending to 12%. This increase is in line with the Zanzibar Education Policy objective to ensure adequate funding of non-salary operational spending. However, the non-salary recurrent spending is still a relatively small allocation, and the items mentioned in the policy (instructional materials and teachers’ professional development) are largely financed by donor-funded development projects, rather than the Government’s recurrent budget.

Development project spending by the Government has varied from TZS 2 to 4 million, but donor spending peaked most recently at TZS 25 million in 2012/13, and has since dropped to TZS 7 million. This volatility reflects the phasing in and out of projects with substantial budgets, such as the World Bank ZABEIP, project which ended in 2013.
The MoEVT has a strong financial reporting system which allows data to be sliced and presented in multiple ways. First, there are two main types of spending: recurrent and development. Recurrent expenditure relates to the daily operations of the Government. Development are specifically identified projects, funded by some combination of the RGoZ exchequer and development partners. The demarcation of recurrent and development expenditure is somewhat ambiguous, since activities such as purchasing furniture, procurement, or teacher training may take place under a named development project, and equally may be a routine activity under recurrent.

Under recurrent expenditure, there is an allocation to the Ministry head office (the Unguja and Pemba departments and coordinators, which includes schools, TCs and adult learning centres), and an allocation called subvention, which is to semi-autonomous bodies such as SUZA and Zanzibar Library Services. The full list of departments/bodies is given in Annex E. Under these categories it is possible to further disaggregate spending by salary and non-salary expenditure.

Figure 13 below shows how these categories and sub-categories work.
Note that the RGoZ exchequer also has revenue from development partners in the form of general budget support and multilateral debt relief initiative, but we consider these to be the central pool of government funds.

3.3 Ministry spending in the national context

The MoEVT’s spending has accounted for around 16–22% of the total national budget for the last decade (Figure 14). At the same time, this spending had a value of 3.8–4.5% of GDP. The volatility of the proportion of budget given to education implies that the MoEVT’s place in national priorities has varied over time. International guidelines suggest that around 4–6% of GDP should be devoted to education, and between 15–20% of government expenditure, putting Zanzibar within this range.\(^\text{12}\)

Figure 14: Resources committed to education: MoEVT spending as a % of GDP and of the national budget

For all but two years in the last decade, the MoEVT has taken up over one-fifth – sometimes close to one-quarter – of the total national recurrent budget (Figure 15). This share appears to have been increasing. The major reason for this is the high salary bill attached to the Ministry’s payroll. Figure 16 shows this more clearly. Of all the Government spending on ministry salaries (this excludes subvention salaries), 38% went to education. As is the case in many countries, the MoEVT has a huge staff of school teachers, who absorb much of the Government’s wage bill.

The Ministry’s share of RGoZ spending on development projects (i.e. excluding donor spending) has been declining in recent years, with a longer term fall from 16% of spending in 2002/3 to 5% in 2014/15.

\(^\text{12}\) For example, the Incheon Declaration signed at the World Education Forum in May 2015 urges adherence to domestic allocations of ‘at least 4-6% of GDP and/or at least 15-20% of total public expenditure on education’.
3.4 Execution against budget

Budgets are set for the financial year starting in July (see Box 6); however, actual expenditure by the MoEVT depends on a number of steps. For recurrent spending, it first depends on what is released from the MoF. The MoEVT prepares a cash flow for recurrent expenditure, and the MoF reviews these requests against priorities and its available funds in making decisions about release. Staff salaries take priority, and the budget is always honoured so that staff are paid what they expect. This means that if fewer funds are available than budgeted, it is non-salary items which receive less than budgeted. On the whole, almost all the funds released are then actually spent, so the execution rate of recurrent spending against budget reflects the release from the MoF rather than implementation constraints.
Figure 17 shows the execution rates of government funds for the MoEVT. Spending on salaries was close to 100% of that budgeted for each of the last five years. Non-salary recurrent expenditure was close to 100% in 2011/12 and 2012/13; however, it was only 87% of the budgeted amount in 2010/11, and had fallen to only 68% in 2014/15.

**Figure 17: Execution rates: MoEVT recurrent spending against original budget by type**

![Execution rates graph](image_url)

Source: MoEVT IFMIS.

MoF releases its funds in two categories. The central MoEVT is released funds, and has autonomy over allocation among its departments. Meanwhile, the semi-autonomous bodies receiving subvention are released funds directly from the MoF. On the whole, execution of the subvention spending compared with the budget has been higher than that of the MoEVT departments – as seen in Figure 18.

The process for determining allocation within the MoEVT is carried out monthly. Each department director sends a letter of request to the Principal Secretary, setting out their highest priorities. The Principal Secretary will make a decision on allocation, consulting the Minister and Deputy Principal Secretaries as necessary. Within the MoEVT, for the past two years the Unguja departments received and spent substantially more of their budget than the Pemba departments. For example, in 2014/15, while Unguja received and spent almost 75% of its budget, Pemba spent less than 35%. This raises a question about how the allocation by the MoEVT among its departments is made. Pemba staff reported that the amount they received was only really enough to cover office operations such as fuel and utilities, leaving too little to actually prioritise. That said, the Unguja offices carry out spending which is to benefit both islands – for example, some procurement of goods (such as science equipment and exam fees) and policy development all take place under the Unguja budget.
Figure 18: Execution rates: MoEVT non-salary recurrent spending against original budget

Source: MoEVT IFMIS.

Funds for development projects are released into separate special accounts (one for each project, separate for government and donor funds). A similar process happens whereby the Ministry requests funds – monthly for RGoZ and usually quarterly for donors – giving projections of spending for the request period and information on expenditure in the previous period. Donor funds may be transferred directly to MoEVT special accounts, or go through the MoF first, but the process is transparent to the MoEVT. Government development actual expenditure varied widely, between 40% and 80% of the budgeted amount, between 2010/11 and 2014/15. Similarly, expenditure financed by the development partners has ranged from around 22% to 75%. In this case, the lower release and spending could be about limited funds but could also be about the Ministry inadequately planning and being challenged with implementation realities.

Figure 19: Execution rates: MoEVT development spending against original budget

Source: MoEVT IFMIS.
Box 6: The budgeting process

The annual budget process is initiated by the MoF and the Zanzibar Planning Commission in December. For development projects, the Zanzibar Planning Commission collects information on which projects are likely to be a priority. For the recurrent budget, MoF meets with stakeholders. Meanwhile, revenue projections for the next financial year begin. In February, headline priorities and commitments are supposed to be issued to line ministries, along with indicative ceilings for their budgets. Line ministries should submit their proposals for projects and recurrent spending around March, which after approval by Finance and Planning is taken to the Cabinet in April. The full budget will go to the House of Representatives for endorsement in May, although in the past this happened in June–July, which was too late for the financial year starting in July.

Development projects can be a combination of government and donor contributions. Some are ‘commitment projects’, meaning there is an agreement with an external partner for the Government to spend a specified amount. Others are ‘contribution projects’, meaning the Government is expected to contribute but the amount is not specified, and it may be a contribution in-kind (staff time or office space, for example). There are also development projects made up entirely of government funds. For new development projects, line ministries used to submit a project document, but now have a more thorough process of feasibility studies and impact assessments (for example, environment and heritage impact). A template is completed for ongoing projects, allowing them to be reviewed. Projects must be aligned to the Government’s priorities as set out in MKUZA II.

This version above is the ideal situation, but what actually happens from the MoEVT’s perspective can be different. A budget coordination team is set up within the MoEVT, and although they intend to start planning the next budget as soon as the previous budget is confirmed, in reality the process starts in April. The budget team commissions directors, heads of divisions, units and subvention institutions to prepare a costed plan of activities for the next three years. Activities must come from the ZEDP, and guidance on unit costs is given by the accountants and procurement units. Once the team has compiled the budgets, they are submitted to the MoF. It is only after this point that the MoF gives the MoEVT a ceiling – usually much lower than that requested. The MoEVT then has just a few weeks to reprioritise and submit a new total budget to the MoF by the end of May. It seems the Ministry could start this preparation earlier, but would also be helped by receiving realistic ceilings from the MoF in advance.

3.5 Household contributions and school income

3.5.1 Household spending on education

Households contribute to education in a number of ways. They may pay fees or contributions to schools, which vary by school. Until recently, government primary schools collected ‘voluntary contributions’ – discussed further below – and private and community schools also collect fees. In addition to this, parents are expected to pay for school uniforms, shoes and bags, and to purchase some stationery, such as exercise books and pens and pencils. Head teachers interviewed for this report estimated this cost would be a minimum of TZS 50,000 per year for one child. Based on average household expenditure, this would represent less than 2% of household spending per year.

It is estimated that 2% of a Zanzibari’s monthly expenditure is on education (Zanzibar Household Survey, 2010). This average is higher for urban areas (2.5%) than rural areas (1.5%), perhaps reflecting the greater use of more costly private education in urban areas and higher enrolment rates in urban areas. This is a per capita average, so would be higher for households with multiple children. On the 2009/10 data, this worked out as around TZS 4,000 for a household each month, or TZS 50,000 per year. Again, this may be an underestimate as some households will not have any children in school.

On top of these costs directly related to schooling, parents take on the costs of feeding their children and any transport needed to get to school.
3.5.2 Voluntary contributions

Until 2015, the Government allowed schools to collect voluntary contributions from parents towards the running of the school. At primary level, the recommended amount was TZS 3,500 per year, but schools were able to set their own amount for parents, and EMIS data shows that on average schools collected TZS 2,281 per student in 2014 (Table 4). Meanwhile, a small survey of 21 schools carried out by the World Bank for the ZISP preparation found that 80% of primary schools collected a contribution, ranging between TZS 2,000 and 5,000 per year, except for in Standard 1, where up to TZS 10,000 was collected (this included a registration fee). At secondary level, the average collection according to EMIS was TZS 7,471, 50% higher than the recommended TZS 5,000. According to the small ZISP survey, contributions increased by form and ranged from TZS 3,000 up to almost TZS 50,000 per year.

Table 4: Schools' income from parents, 2014

<table>
<thead>
<tr>
<th>Level</th>
<th>Schools</th>
<th>Pupils</th>
<th>Total Income</th>
<th>Average income per pupil</th>
<th>Schools reporting no income</th>
<th>Government recommended contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>TZS</td>
<td>TZS</td>
<td>%</td>
<td>TZS</td>
</tr>
<tr>
<td>Primary schools</td>
<td>269</td>
<td>233,470</td>
<td>532,557,500</td>
<td>2,281</td>
<td>7.4</td>
<td>3,500</td>
</tr>
<tr>
<td>Secondary schools</td>
<td>209</td>
<td>74,677</td>
<td>557,896,328</td>
<td>7,471</td>
<td>5.7</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Source: EMIS.

Figure 20 below shows the range of average contribution collected from parents across the districts. Schools in Urban, West and Wete districts received the highest income at up to TZS 3,200 on average. North A recovered the lowest average income of TZS 600, and had almost 28% of schools reporting no income collected from pupils’ parents (unless this was to do with incomplete EMIS questionnaires). At secondary level the pattern was similar (Figure 21). Again Urban and West’s schools collected by far the highest income on average, with North A having the lowest income and most schools reporting no income from parents.

Figure 20: Primary school income from parents’ voluntary contributions, 2014

Source: EMIS.
On 12 January 2015, the President announced that voluntary contributions would be banned.\(^{13}\) Following this, after estimating unit costs and negotiations with MoF, the Ministry has a budget in 2015/16 for almost TZS 29,000 per primary student to purchase materials and cover exam costs. This annual amount of TZS 29,000 is much higher than the previous recommended contribution of TZS 3,500, and the average actual contribution of TZS 2,281.\(^{14}\) The allocation includes provisions for some items which were not previously purchased by schools through the contributions collected, such as textbooks, as well as TZS 10,000 for exams, which parents previously paid for separately. Although the President spoke only of primary education (with a view to extending to secondary later), the Ministry has also budgeted TZS 19,000 per student in pre-primary.

The MoEVT will centrally procure and distribute items to schools in place of parent contributions. At this point, out of an annual budget of TZS 7 billion for materials and items, the Ministry has received around TZS 700 million (10%). The MoEVT has tendered for exercise books, registers, and chalk, which are due to be distributed to schools in January 2016. Ministry officials in Pemba explained that the items would be distributed based on school enrolment, but there is some room for local discretion in allocation between schools.

There are some school running costs which the Ministry will not cover. These are things which largely require actual finance rather than goods, such as utilities. Schools will be expected to resource these expenditures themselves, likely through school management committees (SMCs) or community contributions. The district officials and schools visited for this situation analysis were not aware that the Government would not be covering some items.

The response to this change has generally been positive. For parents it is good news: they no longer pay voluntary contributions. The education providers we spoke with (teachers, head teachers, and officials) were also positive. Those interviewed for this analysis had confidence that the Government will deliver, particularly as it was a Presidential commitment. For schools it removes some difficulties in collecting money from parents, who often cannot or do not want to pay.

\(^{13}\)’From the next financial year, which begins in July 2015, parents will no longer be obliged to contribute fees for their children in primary schools.’ AllAfrica.com (13 January 2014), ‘Tanzania: Free Education Back in Zanzibar’, \http://allafrica.com/stories/201501130370.html\.

\(^{14}\) As a comparison, the 2015/16 budget allocation for primary schools is TZS 4.3 billion for materials and TZS 2.3 billion for exams; whereas, according to the 2014 EMIS, the total income of public primary schools from parents was just over TZS 0.5 billion.
However, the implementation risk is large. It will be critical for the Ministry to consult schools continually to understand what items they need, and find some flexibility in what is given to schools (who may not all need the same things). Since the funds are not going directly to schools, there is a reduction in their autonomy to decide and buy what they need, which could mean less efficient spending, and they will not be able to respond to urgent needs. Schools may also need guidance on how to finance costs that the Government will not cover, such as utilities. It is also unclear how the Ministry will use funds for items such as internal exams, which until now have been produced by schools individually.

The Ministry will also need to maintain a strong negotiating position with the MoF to get these funds, making accurate budgets and securing actual release. The low release of funds so far this year suggests that this could be an issue even in the first year. Experience in other countries has shown that school grants (which this is a form of) can end up being squeezed out of actual expenditure, having an impact on the delivery of high-quality teaching and learning. If this is the case, schools may find it hard to collect additional voluntary income from parents (as they did in the past), given that they have heard the Government promise to cover the cost of primary education.

3.5.3 Other school income

Schools may receive support – both financial and in-kind – from other sources. In the ZISP survey, four out of 10 primary schools collected money from parents for exam fees, as did two out of 11 of the secondary schools. In addition, a small number of schools reported income from other non-household sources, ranging in this small sample from TZS 1 million to TZS 17 million in the year. These other sources may be non-governmental organisations (NGOs), philanthropists, local politicians, and communities. Communities in particular are expected to find funds to start new construction of classrooms within schools, and the Government is then expected to fund completion. An example of school finances is given in Box 7.

Box 7: Finances at Mtemani Primary School, Micheweni

Before the change in policy, the voluntary contributions from parents were set as the following:

Table 5: Voluntary contributions for Mtemani Primary School

<table>
<thead>
<tr>
<th>Standard</th>
<th>S 1</th>
<th>S 2–5</th>
<th>S 6–7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount TZS</td>
<td>4,000</td>
<td>2,500</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Roughly 70% of the parents paid. After the President’s speech on 15 January 2015, some parents stopped paying even though the announcement was to stop voluntary contributions from July 2015. The head teacher felt that the policy was good so long as the Government does provide the items, which she was confident they would. For items which the Government will not cover (e.g. utilities), the head will ask the SMC and community to help.

The school spends its income from contributions on chalk, sports, office books, SMC meetings, transport, maintenance and repairs, and electricity and water. Other sources of support to the school include the Care and Share NGO project, which provided uniforms and half of the expected contribution for 100 pupils from different circumstances between 2009 and 2015. The school also has six unfinished classrooms, which were started by the community in 2013; they have been waiting for government support to finish them. They estimated that parents spend a minimum of TZS 50,000 each year on uniforms, bags, shoes, exercise books and stationery for school.

3.6 Conclusions

This chapter has shown that education does receive a sizeable amount of public spending. The actual amount has grown in recent years, and as a share of the national budget that the MoEVT
has received: 16–22% for the last decade, or 3.8–4.5% of GDP. This compares positively to international guidelines for governments to commit 15–20% of their budgets to education, and 4–6% of GDP. The MoEVT has received an increasing amount of the national recurrent budget, and accounts for 38% of all spending on ministry salaries.

Salaries account for a large part of the MoEVT’s expenditure – this has risen year on year from TZS 37 million five years ago (around 60% of spending, including donor funding to development projects), up to TZS 70 million in 2014/15 (77% of spending). Non-salary recurrent spending has also generally increased, from TZS 5 million in 2010/11 to TZS 11 million in 2014/15, or from 8% of total spending to 12%.

However, despite the high budgets and spending, execution rates are low for non-salary recurrent spending, indicating that the Ministry does not release the full amount budgeted from the MoF. Salaries have almost 100% release and spending rate against the budget, and this prioritisation crowds out other activities. This need for prioritisation will be looked at more in the next chapter.

A serious change to the financing structure of the MoEVT is the abolition of voluntary contributions and the expectation that the Government will purchase goods for schools, covering the full cost of basic education. Given the problems with release of budget from MoF, there is a risk that the same will happen to the budget for school materials and exams, leaving the MoEVT without the funds it needs to deliver what parents and teachers expect. The MoEVT will need to plan for how to manage this, including its negotiating strategies with MoF, and its communication with schools and parents on how they can continue to support schools.
4 A closer look at the MoEVT budget

Box 8: A closer look at the MoEVT budget: key findings

- Under the recurrent budget, salaries dominate the expenditure, accounting for 90% of recurrent spending in 2014/15.
- Within the allocation of the non-salary recurrent budget, the semi-autonomous bodies receiving subvention, and MoEVT departments at Unguja, tend to have a higher execution rate than coordinating units at Pemba – meaning that they receive and spend more of their original budget. However, for the Unguja departments this is partly explained by the centralised purchasing of items – such as exam fees, furniture, and sports goods.
- Pre-primary and primary education receives the largest share of spending, at around 50%, although this has been recently declining. This is followed by secondary and then tertiary. However, when salaries and development expenditure are removed, we see that tertiary takes over 50% of non-salary recurrent spending due to the large amount spent on student loans.
- Development expenditure has fallen quite substantially in the last two years, as some large projects were phased out in 2013. At under TZS 10 billion in 2014/15, development projects accounted for 10% of MoEVT spending, far less than the TZS 28 billion in 2012/13, which was almost 30% of spending. Funds from donors vastly outweigh government contributions in terms of development projects.
- In terms of unit costs, the average recurrent spending per student is highest for TVET at the VTCs and KIST, generally TZS 2–4 million per student per year in the last five years. Secondary is next highest at around TZS 350,000 in 2014/15, followed by pre- and primary (TZS 129,000) and adult/alternative education (TZS 67,000).
- Average teacher salaries are estimated to be around 2.2 times GDP per capita, which is low compared to international guidelines of 3.5.

4.1 Introduction

The previous chapter gave an overview of the contributions to education spending from three main sources: government, development partners, and households. In this chapter, the analysis goes deeper into the details of MoEVT spending, both recurrent and development.

With IFMIS data, expenditure can be broken down by type of spending, by department (such as the Department of Secondary Education, or the ZEC), and with some assumptions, by subsector (e.g., pre-primary and primary, secondary, tertiary). Actual spending has been compared against original budgets to examine how departments are prioritised when amounts are released from the MoF. The unit costs of aspects of education are analysed, such as construction, textbooks and salaries.

In order to understand the other sources of financing to education, contributions to development projects from donors are examined.

In this chapter, there is more examination of the pre-tertiary sectors (pre-, primary and secondary schools). Later chapters go into more detailed analysis of the unit costs of the tertiary and TVET sectors.

4.2 Recurrent spending in 2014/15

The MoEVT’s recurrent spending in 2014/15 was dominated by salaries, which took up TZS 70 billion, 87% of the total recurrent spending of TZS 80 billion (Figure 22A). Further, this came to 77% of all spending (recurrent and development, including RGoZ and development partners) in 2014/15. Over half of recurrent spending was under the Unguja part of the MoEVT, which includes all government schools and teachers’ salaries on Unguja, and centralised costs at the MoEVT.
head office. Pemba's departments received TZS 17 billion, and the subvention bodies together received TZS 15 billion – giving each of these categories less than a quarter of total recurrent spending. Execution against the budget for non-salary recurrent categories is shown in Figure 22B. Execution was highest for Unguja at 74%, followed by the subvention bodies (68%), while Pemba received only 35% of its budget.

**Figure 22: Recurrent spending by major departments in 2014/15: actual and execution**

A: Actual spending: all recurrent

<table>
<thead>
<tr>
<th>Recurrent Expenditure (Tsh billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unguja MoEVT</td>
</tr>
<tr>
<td>Pemba MoEVT</td>
</tr>
<tr>
<td>Subvention</td>
</tr>
<tr>
<td>All recurrent</td>
</tr>
</tbody>
</table>

B: Execution rate: non-salary only

<table>
<thead>
<tr>
<th>Expenditure as % of budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unguja MoEVT</td>
</tr>
<tr>
<td>Pemba MoEVT</td>
</tr>
<tr>
<td>Subvention</td>
</tr>
<tr>
<td>All recurrent</td>
</tr>
</tbody>
</table>

Source: MoEVT IFMIS.

Annex E gives a more detailed breakdown of the actual recurrent spending and non-salary recurrent execution rates by department and body in 2014/15. Some key points are:

- The Pre-Primary and Primary and Secondary departments in both Unguja and Pemba take the largest portions of spending, reflecting spending on teacher salaries.
- The largest departments in terms of non-salary expenditure were DPPR, Civil Servant and Administration\(^{15}\) and Secondary, all in Unguja.
- In terms of the subvention bodies, the ZHELB spends the most and this is mostly non-salary (i.e. the loans themselves), followed by SUZA, which is largely salary costs.
- The execution rates of non-salary recurrent expenditure vary quite widely.
- The departments in Unguja all spent over 60% of their original budgets, whereas in Pemba, with the exception of Pre-Primary and Primary, all departments spent less than 40% of their budgets.
- For the institutions receiving subventions, execution ranged from as low as 21% for KIST (which reflects the very low release from the MoF) up to 100% for the two TTCs on Pemba.

Detailed expenditure data was examined to highlight some of the large spending items under the highest spending departments at the MoEVT (i.e. not including subvention). In 2014/15 the Unguja departments spent much more in absolute terms on non-salary recurrent items (see Table 6), as well as having higher execution rates (see Annex E), than the Pemba departments.

---

\(^{15}\) Recorded in the IFMIS as Civil Servant and Administration, but as a Department it is Administration and Personnel.
Table 6: Expenditure by MoEVT departments on plant and equipment (capital) and supplies and consumable goods, 2014/15

<table>
<thead>
<tr>
<th>Department</th>
<th>Unguja</th>
<th>Pemba</th>
<th>Total</th>
<th>Unguja’s % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TZS</td>
<td>%</td>
<td>TZS</td>
<td>%</td>
</tr>
<tr>
<td>PURCHASE/CONSTRUCTION OF PLANT AND EQUIPMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPPR</td>
<td>1,152,579,519</td>
<td>97</td>
<td>945,000</td>
<td>6</td>
</tr>
<tr>
<td>Civil servant and Admin*</td>
<td>16,294,560</td>
<td>1</td>
<td>4,358,250</td>
<td>28</td>
</tr>
<tr>
<td>Pre- and Primary</td>
<td>3,500,000</td>
<td>0</td>
<td>1,448,500</td>
<td>9</td>
</tr>
<tr>
<td>Secondary</td>
<td>1,380,000</td>
<td>0</td>
<td>7,395,000</td>
<td>48</td>
</tr>
<tr>
<td>Teacher education</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Adult</td>
<td>1,329,220</td>
<td>0</td>
<td>312,000</td>
<td>2</td>
</tr>
<tr>
<td>ICT</td>
<td>11,581,422</td>
<td>1</td>
<td>896,000</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>1,186,664,721</td>
<td>100</td>
<td>15,354,750</td>
<td>100</td>
</tr>
<tr>
<td>SUPPLIES AND CONSUMABLE GOODS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPPR</td>
<td>97,643,472</td>
<td>7</td>
<td>28,602,500</td>
<td>17</td>
</tr>
<tr>
<td>Civil servant and Admin*</td>
<td>293,219,019</td>
<td>20</td>
<td>44,767,750</td>
<td>26</td>
</tr>
<tr>
<td>Pre- and Primary</td>
<td>69,170,101</td>
<td>5</td>
<td>62,974,410</td>
<td>37</td>
</tr>
<tr>
<td>Secondary</td>
<td>845,873,800</td>
<td>58</td>
<td>13,033,800</td>
<td>8</td>
</tr>
<tr>
<td>Teacher education</td>
<td>60,730,998</td>
<td>4</td>
<td>7,095,000</td>
<td>4</td>
</tr>
<tr>
<td>Adult</td>
<td>54,520,882</td>
<td>4</td>
<td>8,958,000</td>
<td>5</td>
</tr>
<tr>
<td>ICT</td>
<td>27,049,898</td>
<td>2</td>
<td>8,958,000</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>1,448,208,170</td>
<td>100</td>
<td>171,900,460</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: MoEVT IFMIS. Note: *Civil servant and Admin is how Administration and Personnel is recorded in IFMIS.

Of the TZS 1.2 billion spent on capital/construction, over TZS 1.1 billion was spent by Policy, Planning and Research in Unguja on buying school furniture – and this accounted for 97% of all capital expenditure by MoEVT Unguja. This apparently comes from a tax on passengers on the Zanzibar ferry, proceeds of which are ring-fenced for school furniture.

Of the supplies and consumable goods, 89% of the total TZS 1.6 billion was spent by Unguja. Of this (TZS 1.4 billion), 58% of spending was by the Secondary Education department, of which the largest item was examination expenses, at around TZS 0.5 billion. This item was not in previous years’ budgets, and came after government announced that Form 4 and Form 6 students would no longer pay exam fees and instead the Government would cover this cost. In fact the Ministry apparently still owes a substantial amount to the National Examinations Council of Tanzania (NECTA), which the MoF has not yet released. Secondary education also spends a large amount on teaching materials, which is largely laboratory equipment.

Other items with high spending were made by the Civil Servant and Administration department in Unguja, which included TZS 84 million on sports goods, reflecting a government initiative to promote sports in schools, and over TZS 73 million on travel and subsistence costs.

4.3 Spending by subsector

The pre-primary and primary subsector receives by far the largest portion of spending, usually at around half of all spending, and this was as high as TZS 50 billion in 2012/13 (Figure 23A). However, for the last four years the proportion of all spending given to this subsector has been
decreasing (Figure 23B). The international benchmark is that 50% of education budgets should go to primary education. Although it is not possible to break down this pre- and primary subsector further, we know that the majority of funds go to primary. There were very few government pre-primary schools compared with government primary, so the salaries of pre-primary teachers and other expenditure would generally be low compared with primary. However, there has been substantial support from donors for pre-primary through development projects, which reflects the fact that in recent years this has been an international priority and perhaps also a growing national priority. The Zanzibar Education Policy (2006) includes expectations of expanding access to two years of pre-primary as part of basic education, but a partnership with communities and NGOs is expected in operating early childhood activities – which includes expectations of cost-sharing. At primary level, the Policy has the clear objective to ensure all primary school-aged children enrol at the right age and successfully complete primary education. The high spending on this subsector is therefore in line with this task.

Secondary receives the next largest amount of spending, and this has increased over recent years, reflecting a commitment to include lower secondary (Forms 1–4) in compulsory basic education. MKUZA II in particular sets out a number of targets for secondary education access, and teacher quality. Tertiary receives the next largest amount, which includes teacher education at the MoEVT (such as the TCs) and reflects the Policy objectives to improve teacher education and expand access to tertiary for more Zanzibaris.

The TVET and adult and alternative subsectors receive a very small proportion of total expenditure, although the Policy includes objectives to increase access to lifelong learning through traditional education, training and work-based learning, to diversify and renew adult and alternative programmes, and to increase access to technical and vocational education.

These allocations have been made on simplifying assumptions about salary spending and development projects, and by placing a number of cross-cutting institutions into the MoEVT overheads. The full list can be found in Annex E.

Figure 23: Spending: recurrent and development by subsector

A: Spending amount (TZS billions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated expenditure Tsh billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td></td>
</tr>
<tr>
<td>2011-12</td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td></td>
</tr>
<tr>
<td>2013-14</td>
<td></td>
</tr>
<tr>
<td>2014-15</td>
<td></td>
</tr>
</tbody>
</table>

B: Allocation of spending by subsector (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated expenditure %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td></td>
</tr>
<tr>
<td>2011-12</td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td></td>
</tr>
<tr>
<td>2013-14</td>
<td></td>
</tr>
<tr>
<td>2014-15</td>
<td></td>
</tr>
</tbody>
</table>

16 Until 2014/15, all salaries (except for a few subvention bodies) were centralised in the Civil Servant and Administration department. In 2014/15, they were divided by the relevant department at MoEVT. In order to estimate the sub-sector spending for previous years, the proportion of allocation by sub-sector in 2014/15 was applied to the four years 2010/11 to 2013/14. If we had not done this, around 60% of all spending would have come under the MoEVT overhead.
Source: MoEVT IFMIS. Note: Some development projects have been crudely categorised for simplification. For example, strengthening compulsory education has been put under pre-primary and primary, but includes projects such as ZABEIP, so a large portion of this spending should arguably go to Secondary, which should shift the subsector proportions dramatically. Strengthening alternative learning has been put under Adult, but includes TVET. See Annex E.

Looking at recurrent spending alone, the same pattern can be seen, with the amount on each subsector generally increasing over the last five years, and total spending falling as the level of education increases (Figure 24). In 2014/15, 40% of recurrent spending went on Pre-primary and primary, 32% on Secondary, and 17% on Tertiary.

**Figure 24: Recurrent spending by subsector**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- and primary</td>
<td>20</td>
<td>22</td>
<td>25</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>Secondary</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Tertiary</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>MoEVT overhead</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>TVET</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Figure 24:** Recurrent spending by subsector

A: Actual spending, 2010/11–2014/15

If we remove salaries and only look at non-salary recurrent spending, the picture is very different. Here, Pre-primary and primary receive very little, and Secondary receives more but still little given the numbers enrolled. These low amounts reflect the cost-sharing model used until recently, in which parents made voluntary contributions to cover the cost of running schools, as well as paying for their children’s materials, such as exercise books and stationery. This meant that the Government covered very few non-salary operational costs. Spending on secondary education has increased the most rapidly recently due to the Government paying for examination fees from 2014/15. Tertiary receives by far the largest portion of non-salary recurrent. This, as discussed further in Chapter 10, is almost entirely due to the issuing of student loans, which take up around half of the total non-salary recurrent budget. The MoEVT overheads also receive a large amount, but there are items here which are actually specific to the pre-primary, primary and secondary sectors, for example the DPPR purchases school furniture (see Table 6 and the discussion above).
Development spending by subsector is much more volatile, as projects stop and start and focus on different issues. Figure 26 shows that Pre-primary and primary have received by far the most development expenditure in the last five years; however, that amount has varied from over TZS 24 billion to around TZS 4 billion. Other subsectors have varied too: Tertiary received a substantial amount in previous years but none in 2014/15; Adult and alternative education received a substantial portion just in the last three years. Secondary appears to receive very little, but this may be due to categorisation of 'compulsory education' under Primary when it should include Secondary. More detail on the development projects is given in the next section.

**Figure 26: Development spending by subsector**

Source: MoEVT IFMIS. Note: Some development projects have been crudely categorised for simplification – e.g. strengthening compulsory education has been put under Pre-primary and primary, but really includes Secondary; and strengthening alternative learning has been put under Adult, but includes TVET. See Annex E.

### 4.4 Development projects

Development expenditure has actually fallen quite substantially in the last two years (and this is in nominal terms, so in real terms the decrease is even greater). At under TZS 10 billion in 2014/15, development projects accounted for 10% of MoEVT spending, far less than the TZS 28 billion in 2012/13, which was almost 30% of spending. These irregular jumps in development spending occur as large donor projects begin and come to an end. For example, the World Bank ZABEIP programme funded TZS 10–20 billion each year in 2010/11 to 2012/13; after the programme closed in 2013 there was no funding from the World Bank in the two following years.
Funds from donors vastly outweigh government contributions in terms of development projects, as seen in Figure 27 below. (And although government contributes the majority of spending overall, donor funds were as much as a quarter of all MoEVT spending in 2011/12 and 2012/13 – see Figure 12A above.) Given that development projects include a number of activities which should not be considered one-off – such as teacher training – it may be preferable to see more of these costs being absorbed by government, and moving into the recurrent budget.

Spending against the original budget tends to be higher for government funds than for development partner funds, as seen by the execution rates. There are various reasons for low execution of development partner funds – delays and inaccurate planning and implementation, and delays in development partners’ approvals procedures and fund release.

**Figure 27: Development project: actual spending and execution of spending against the budget**

![Graph showing actual spending and execution rate against budget for government and development partner funds from 2010-11 to 2014-15.](image)

Source: MoEVT IFMIS.

An overview of the main development projects which receive donor funding is given in Annex E. This funding has been a combination of grants (GPE, Swedish Development Agency – SIDA – and UNICEF) and loans (African Development Bank, the World Bank, and the Arab Bank for Economic Development in Africa – BADEA). Grants have tended to focus more on pre-primary and primary, and have been used for a combination of construction and facilities provision, teaching and learning materials, and capacity building. The loans have also been used for construction and some materials, but targeting other subsectors. The African Development Bank (AfDB) project focuses on vocational and alternative learning options, the previous World Bank project was for expanding basic education access and quality, while the BADEA funds have been used for construction of SUZA and some for construction of two secondary schools.

There are also projects supported by development partners where the funds do not flow through the Ministry and so are not recorded in the financial system and statements. These 'off-budget' development projects are summarised in Annex E. They include projects from foundations to improve the quality of teaching and learning (e.g. Aga Khan, Educate a Child – Qatar) and from traditional donors (e.g. United States Agency for International Development – USAID – support to instruction through use of ICT, and Chinese and Korean financing of school construction).

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17 This section draws heavily on the Zanzibar Education Strategic Directions Paper, prepared as part of the new World Bank project preparations.
4.4.1 Focused look at selected development projects

The analysis team were able to get more detailed spending information for three large development projects, to give a better understanding of how these funds are used. Note that these figures are not always consistent with those in IFMIS so they should be used as indicative only.

The GPE project has spent a total of TZS 3.6 billion up to September 2015. The distribution of spending among the four priorities and operating costs are shown in Figure 28A. Priority 2 has by far the largest expenditure, and this includes a number of teacher training activities, around TZS 1 billion on procuring textbooks, and substantial purchases of books for libraries. Figure 28B gives an indication of the status of implementation, in terms of the proportion of planned funds spent to date. Under Priority 1 less than a third of planned spending has taken place, and less than half of Priority 2’s expected spending has been executed. These results points to difficulties in either accurate planning or successful implementation of the project components.

Figure 28:  GPE programme expenditure to date

A: Expenditure (TZS millions) to September 2015, by priority area

B: Execution (spending against amount planned to date)

Source: MoEVT Project Accountants.

The MoEVT spent almost TZS 1 billion using UNICEF funding in 2012/13, and this was in part due to the component of construction of school water, sanitation and health facilities (see Table 7). Since then, annual spending has been closer to TZS 100 million, and has largely focused around capacity building for primary and pre-primary school teachers and leadership.
Table 7: UNICEF-funded spending for 2012/13 to 2015/16

<table>
<thead>
<tr>
<th>Year</th>
<th>Spending (TZS)</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/13</td>
<td>949,207,300</td>
<td>Capacity building for inspectors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of sign language dictionary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Printing science and mathematics modules</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction of toilets, basins and boreholes for schools</td>
</tr>
<tr>
<td>2013/14</td>
<td>108,402,675</td>
<td>Preparation of Self-Directed Teachers Module 3</td>
</tr>
<tr>
<td>2014/15</td>
<td>108,352,000</td>
<td>Training of head and assistant head teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of ECD at SUZA</td>
</tr>
<tr>
<td>2015/16</td>
<td>124,430,000</td>
<td>Preparation of modules for primary school teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Addendum for extra work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of ECD at SUZA</td>
</tr>
</tbody>
</table>

Source: MoEVT Project Accountants. Note: the figures here are inconsistent with those given in MoEVT IFMIS.

As with the UNICEF funds, MoEVT spending using SIDA funds also appears to vary widely across years (Figure 29). Again, this is due to construction, which in 2013/14 accounted for TZS 1.8 billion. Capacity building cost TZS 101 million in 2013/14, and this was used for training teachers and some MoEVT office staff. The monitoring, evaluation and assessment funds went towards research on the assessment system and the SACMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality) IV project.

Figure 29: SIDA education sector support programme spending 2012/13 and 2013/14

```
2012/13  110  38  121  66
2013/14  1,772  101  59  227
```

Source: MoEVT Project Accountants. Note: the figures here are inconsistent with those given in MoEVT IFMIS.

4.5 Unit costs of education

Based on the total estimated expenditure at the subsector level and enrolment, unit costs of spending per student have been calculated. Recurrent unit costs have increased continuously for the last five years in the Pre-and primary sector and Secondary sector, and fluctuated in the Adult/alternative education sector (Figure 30A). The unit costs of secondary have grown particularly fast, at around 20% per year in nominal terms – from TZS 164,000 per student in 2010/11 to 342,000 in 2014/15. It would be useful to investigate further the driving factors behind this increase, other than inclusion of exam fees and some reduction in enrolment, particularly at
advanced secondary level. The average cost of a year of pre-school and primary provision reached TZS 129,000 in 2014/15.\(^\text{18}\)

The technical and vocational courses are much more expensive per student, and more volatile, than schooling (Figure 30B). Spending per student in KIST has varied between TZS 2 billion and TZS 4 billion in recent years, and in the VTCs between TZS 1.7 billion and TZS 4.8 billion per student. The large fluctuations are due to year-on-year changes in both spending and enrolment. The VTC unit cost is particularly high because it includes expenditure on overhead activities such as QA and registering the private providers of TVET.\(^\text{19}\) The average expenditure of SUZA per student is also high at over TZS 2.4 million per year but has been falling as enrolment has expanded. This is an underestimate of the cost of SUZA, given that SUZA has substantial other income from student fees and other sources. Chapter 10 has more detailed unit cost estimates for 2014/15.

Table 8 shows these direct unit costs to government of the schooling, TVET and tertiary institutions. It shows how much more the Government spends per students in higher levels of education than in lower levels. For example, spending per student is 18.5 times higher in SUZA than it is in pre-primary and primary. Some of these costs may be underestimated in terms of the actual costs needed to cover a student, given that institutions have other income sources (student fees, grants from other organisations, and in the case of SUZA, the Government cost of student loans). However, these costs also include some overheads which do not go towards students’ education – such as the VTA running costs regulating other institutions, or SUZA research activity.

**Figure 30: Cost per student of education based on MoEVT expenditure**

A: Recurrent cost per student in schools and adult/alternative learning

B: Cost per student in KIST, VTA/VTCs and SUZA

Source: Finance data from MoEVT IFMIS and enrolment from Statistical Abstracts. Notes on calculations: Spending of financial year 2010/11 is matched to the enrolment in 2010, and so on.

\(^{18}\) It has not been possible to separate out pre-primary from primary based on the categorisation in IFMIS.

\(^{19}\) Note that the VTC unit costs shown here are different to those shown for Vitongoji in Chapter 12. Here, all spending by the VTA is spread across the three public VTC enrolment – so VTA overheads are included. In Chapter 12, only Vitongoji income is used – both a component from the VTA and from other sources (e.g., fees, hall hire).
Table 8: Unit costs: average recurrent spending per student and comparisons with the pre-primary and primary unit cost (TZS)

<table>
<thead>
<tr>
<th></th>
<th>2010–11</th>
<th>2014–15</th>
<th>2014/15 ratio to pre-prim and prim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- and Primary</td>
<td>74,391</td>
<td>129,372</td>
<td>1.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>163,812</td>
<td>342,036</td>
<td>2.6</td>
</tr>
<tr>
<td>Adult/alternative</td>
<td>61,211</td>
<td>67,045</td>
<td>0.5</td>
</tr>
<tr>
<td>VTCs</td>
<td>2,111,119</td>
<td>1,703,097</td>
<td>13.2</td>
</tr>
<tr>
<td>KIST</td>
<td>2,172,996</td>
<td>3,099,141</td>
<td>24.0</td>
</tr>
<tr>
<td>SUZA</td>
<td>4,058,861</td>
<td>2,388,106</td>
<td>18.5</td>
</tr>
</tbody>
</table>

Source: Finance data from MoEVT IFMIS and enrolment from Statistical Abstracts.

4.5.1 Salary costs

We saw in Figure 12 that salary expenditure cost the Ministry almost TZS 70 billion in 2014/15, or 77% of the total expenditure. This includes personal emoluments and allowances given to MoEVT department staff, and the salaries under subvention to autonomous bodies.

Given salaries account for such a large part of expenditure, it is informative to see what this means on average. For staff in the MoEVT departments, their basic salaries are points on a fixed scale which is set by the civil service commission. Each successively higher qualification moves you up a section on the scale, and within that section you gain an annual increment (to a total of 10 years). There is no explicit adjustment for inflation, but it is likely the civil service commission would review these salaries frequently enough to account for substantial inflation. All staff members are on the same scale, meaning primary and secondary teachers with the same qualifications and years of experience would receive the same amount. Table 9 below shows how the salaries range by qualification and length of time in service at that qualification. All Ministry teachers and office staff are on this scale. (Subvention bodies have their own scales.) However, Ministry staff also receive allowances, in particular teaching, housing, transport and responsibility allowances, which are additional.

Table 9: Gross salaries of civil service personnel at MoEVT (TZS)

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Monthly</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Starting salaries (lowest, 1 year)</td>
<td>Highest salary (highest qualification, 10 years)</td>
</tr>
<tr>
<td>Certificate</td>
<td>150,000</td>
<td>224,000</td>
</tr>
<tr>
<td>Diploma</td>
<td>228,000</td>
<td>314,000</td>
</tr>
<tr>
<td>1st degree</td>
<td>321,000</td>
<td>584,000</td>
</tr>
<tr>
<td>Masters</td>
<td>598,000</td>
<td>894,000</td>
</tr>
<tr>
<td>PhD</td>
<td>914,000</td>
<td>1,094,000</td>
</tr>
</tbody>
</table>

Source: MoEVT Administration Department, from Civil Service Commission letter.

MoEVT payroll data for 2015/16 shows there are 6,513 total staff in the Unguja Department of Pre-Primary and Primary, of whom we can assume only a small fraction are not teachers (and of that fraction, some will be more senior office staff and some more junior support staff). Based on the total budget for salaries for the Department, the average salary in 2015/16 will be TZS 3,440,000, or TZS 287,000 per month. This, however, does include transport, housing and teaching allowances. If allowances are removed, this would make the average base salary around TZS...
210,000 per month, making the overall average teacher someone with a certificate and additional short course qualifications. This seems reasonable as an average of some teachers with only a certificate and those with diplomas and degrees.

It is difficult to find estimates of average salaries for Zanzibar separate from Tanzania, but one estimate in 2010 was TZS 170,000 in 2010 (around 240,000 in 2014/15 prices).\(^{20}\) If teachers’ salaries are on average TZS 210,000 per month, this would make it slightly lower than the estimated median wage. Based on GDP per capita of TZS 1.5 million, the average teacher salary is 2.2 times the GDP per capita. This is low compared with a frequently cited target of 3.5 (see EFA GMR, 2015), but given the large share of government spending already going to the MoEVT and to salaries, it is hard to see room for increasing them further unless other efficiency savings are found.

### 4.5.2 Component non-salary unit costs

This section looks at data from the procurement and physical development teams in the MoEVT to understand unit costs of construction, furniture and textbooks.

The unit cost of the construction of classrooms depends on a number of factors, as shown in Figure 31. This compares on a square-metre basis the cost of construction from various contract types, years and projects. Multi-story buildings cost more than single story buildings; however, they may be preferable for fitting more classrooms on limited land and engineers deem them to be more durable. Using contractors, whereby the whole project is outsourced and managed by a company, costs more than using local suppliers (where materials are purchased locally and local labour is used). Some development partners prefer to use contractors rather than separate suppliers: despite the higher price it comes with higher quality construction. This is partly because all 'local' projects are overseen and supervised by just five engineers at the MoEVT (three in Unguja, two in Pemba). Completion of a classroom (which the community started) understandably costs less than new construction from scratch. It is also possible to see how quickly costs increase over time: the cost of the same method under SIDA/RGoZ (new, single story classrooms by local suppliers) increased by 40% between 2010–12 and 2014–15.

**Figure 31: Unit costs of construction depending on building and contract type and year**

<table>
<thead>
<tr>
<th>Completion, single, local, 14/15</th>
<th>SIDA/SMZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion, single, local, 10/12</td>
<td>SIDA/SMZ</td>
</tr>
<tr>
<td>New, single, local, 14/15</td>
<td>SIDA/SMZ</td>
</tr>
<tr>
<td>New, single, local, 10/12</td>
<td>SIDA/SMZ</td>
</tr>
<tr>
<td>New, multi, contract, 14/15</td>
<td>ALSD II</td>
</tr>
<tr>
<td>New, multi, contract, 12/13</td>
<td>ZABEIP</td>
</tr>
<tr>
<td>New, single, contract, 10/12</td>
<td>ZABEIP</td>
</tr>
</tbody>
</table>

Source: Physical Development Division, MoEVT. Notes: New construction or completion; single story or multi-story, contractors or local suppliers, years of project. We find a similar pattern in furniture unit costs – buying chairs and desks through contractors is more expensive than from local suppliers because of the higher overheads, even though the quality is the same. Again, the prices increased substantially over a few years. There are two types of table and chair.

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\(^{20}\) Median wage from Danish Trade Union Council, Tanzania & Zanzibar – Labour Market Profile 2012.
arrangement. The ‘student desk’ fits three students on a bench, so on a per student basis would in fact be much cheaper than the chair and table, which is only for one student. However, the desks with benches are not suitable for secondary level students.

Figure 32: Unit costs of furniture

A: Unit costs student desks (three children each, primary schools)  
B: Unit costs chair and table (one student, secondary schools)

Source: Physical Development Division, MoEVT.

The unit cost of textbooks generally increases as the level of education advances, such that A-level books are the most expensive (Table 10). This could be in part due to the more technical content at upper levels, but there will be some economies of scale in the earlier years where more units are ordered. It is not clear whether international publishers are more expensive, given they have often been used for more advanced and more scientific subjects. It is also not clear if prices have been increasing over time, given the different nature of the textbooks purchased.

Table 10: Textbook procurement from 2007/8 to 2014

<table>
<thead>
<tr>
<th>Level</th>
<th>Subject</th>
<th>Year</th>
<th>Project</th>
<th>Publisher origin</th>
<th>Units</th>
<th>Unit cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards 1–4</td>
<td>Kiswahili, Maths</td>
<td>2013</td>
<td>ZABEIP</td>
<td>Tanzania</td>
<td>33,000+</td>
<td>0.8–1.4</td>
</tr>
<tr>
<td>Standards 1–4</td>
<td>Social Science</td>
<td>2013</td>
<td>ZABEIP</td>
<td>Zanzibar</td>
<td>33,000+</td>
<td>1.9–2.3</td>
</tr>
<tr>
<td>Standards 1–4</td>
<td>English</td>
<td>2013</td>
<td>ZABEIP</td>
<td>Tanzania</td>
<td>142,000</td>
<td>1.5</td>
</tr>
<tr>
<td>Standards 1–4</td>
<td>Science</td>
<td>2013</td>
<td>ZABEIP</td>
<td>International</td>
<td>39,000</td>
<td>2.5</td>
</tr>
<tr>
<td>Standards 5–6</td>
<td>Various</td>
<td>2014</td>
<td>GPE</td>
<td>Mainly Tanzania</td>
<td>45000</td>
<td>1.6–2.6</td>
</tr>
<tr>
<td>Forms 1–4</td>
<td>Biology, Chemistry</td>
<td>2007/8</td>
<td>TLMP¹</td>
<td>International, Tanzania branch</td>
<td>75,000+</td>
<td>2.5–4</td>
</tr>
<tr>
<td>Forms 1–4</td>
<td>Maths, Physics</td>
<td>2007/8</td>
<td>TLMP</td>
<td>International, Tanzania branch</td>
<td>75,000+</td>
<td>4–4.6</td>
</tr>
<tr>
<td>A-Level</td>
<td>Sciences</td>
<td>2007/8</td>
<td>TLMP</td>
<td>Tanzania and International</td>
<td>4,000+</td>
<td>12–16</td>
</tr>
<tr>
<td>A-Level</td>
<td>Maths</td>
<td>2007/8</td>
<td>TLMP</td>
<td>Tanzania</td>
<td>4,000</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: Procurement Management Unit, MoEVT. Note: TLMP is the abbreviation for Textbook and Learning Material Programme.
4.6 Conclusions

This chapter has looked in more detail at the types of spending by the MoEVT, and how this is allocated by department. Recurrent and development spending are covered, as well as subsector spending and associated unit cost per student.

Salaries dominate the MoEVT’s recurrent spending, and in 2014/15 they accounted for TZS 70 billion, out of the total recurrent spending of TZS 80 billion. The remaining TZS 10 billion went to non-salary items, but this was only 68% of what had originally been approved in the budget for these items. This has implications for the planning and implementation of activities, and the MoEVT is constantly having to reprioritise and make decisions on where to spend and what to postpone. At this level, the departments in Unguja tend to receive more of their budgets than those in Pemba, which could be perceived as an inequitable distribution. However, these departments in Unguja actually carry out a large amount of spending which covers both islands, such as centrally procuring items for all schools.

Development expenditure has fallen quite substantially in the last two years, from TZS 28 billion in 2012/13 (30% of spending) down to TZS 10 billion in 2014/15 (10% of spending). This reflects the large financial contribution some projects have, and the changes in funding when projects stop and start (such as ZABEIP which was phased out in 2013). Although RGoZ accounts for the highest source of funds overall, for development projects the funds from donors vastly outweigh government contributions. Development projects include activities which should be considered ongoing – such as teacher training – so it may be preferable to see more of these costs covered by government, and to move them into the recurrent budget. Low execution rates of donor funds against the budget suggest challenges in accurate planning and implementation of activities, as well as some procedural hurdles.

Spending by subsector shows that as the level of education increases, the share allocated to it falls, with pre-primary and primary receiving around half of all spending. However, average spending per student has the opposite pattern, and the higher levels have far fewer students and as a result much higher average costs.

Looking at the components of spending, we see that despite the high allocation to salaries, average salaries are not high compared to international benchmarks. Component costs of construction and furniture depend very much on the type of contract awarded, and more expensive options may be preferable for guaranteeing higher quality due to outsourcing a higher level of supervision. These unit costs can increase quite markedly in a short space of time.
5 Student learning

Box 9: Key findings on student learning

<table>
<thead>
<tr>
<th>Primary students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning achievement of primary students appears to have declined gradually over the past six years.</td>
</tr>
<tr>
<td>More than 20% of students entering secondary education have failed the Standard 7 examination and are very underprepared for the next stage of their education.</td>
</tr>
<tr>
<td>Standard 7 performance in mathematics is particularly poor. It appears that the majority of early grade students are struggling to acquire foundational skills such as simple addition and subtraction.</td>
</tr>
<tr>
<td>Standard 7 performance in language (Arabic, English and Kiswahili) is also relatively poor, but the breakdown between the languages is not available. A sizable group of students are struggling to learn to read in Kiswahili in the early years, but by Standard 6 a large group of students are competent readers (assuming that the situation has not declined markedly since 2007).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordinary secondary students</th>
</tr>
</thead>
<tbody>
<tr>
<td>About 55% of enrolled Form 2 students pass the examination and transition to Form 3, while 45% either do not take the examination or fail the assessment.</td>
</tr>
<tr>
<td>Average scores in the Form 2 examination are low and vary widely by subject. In 2014 average scores ranged from 43% for Kiswahili to 15% for mathematics.</td>
</tr>
<tr>
<td>The Form 4 examination pass rate has been very volatile over the past six years, with year-on-year changes of between six and 26 percentage points.</td>
</tr>
<tr>
<td>The gap between the Form 4 examination pass rate and the percentage of students who meet the grade needed to proceed to Form 5 is very large. In 2014, 57% of public students passed, while only 13% qualified to continue their A-level studies.</td>
</tr>
<tr>
<td>According to rigorous quantitative research, school factors, notably teachers’ level of experience and qualification, as well as their practices of regular marking of homework and continuous assessment, are key factors affecting Form 4 results.</td>
</tr>
<tr>
<td>The large variation in the Form 5 qualifying pass rate in recent years translates into considerable fluctuation in the transition rate between ordinary and advanced secondary and in absolute numbers of students.</td>
</tr>
<tr>
<td>Some students who qualify for Form 5, perhaps the majority in some years, are opting to study in colleges for diplomas rather than to stay in school and take A-levels.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced secondary students</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Form 6 pass rate fluctuated around 80% for the four years from 2009/10, but in 2013/14 there was a marked increase to 96%. The share of candidates obtaining the highest divisions (I and II) also jumped from less than 10% in the earlier years to 20%.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment system</th>
</tr>
</thead>
<tbody>
<tr>
<td>The assessment system itself is problematic. Some symptoms are: (i) the volatility in the externally set examination pass rates and pass rates by division over time, when access has not been shifting dramatically; and (ii) the low correlation between Form 2 and Form 4 results.</td>
</tr>
</tbody>
</table>

5.1 Assessment of student learning

This section provides a descriptive analysis of trends in student learning achievement over the past five to six years. It is divided into four sections. The first gives some background information on data sources and their limitations, as well as a snapshot of trends in standardised examination pass rates at primary (Standard 7), ordinary secondary (Forms 2 and 4) and advanced secondary (Form 6). The three sections which follow cover student learning at primary, ordinary and advanced secondary levels in greater detail, discussing examination participation rates, subject results (where available) and linkages with transition rates to the next stage of education. A discussion on gender and geographical disparities in learning achievement can be found in Chapter 6.
Before the discussion of learning achievement results, it is worth noting that some key aspects of the school education system, directly related to student learning, are in transition, in line with the 2006 Education Policy. A revised primary curriculum covering a six-year cycle, and switching the medium of instruction from Kiswahili to English in Standard 5, was implemented from 2010. The new curriculum was explicitly designed to be well-balanced and relevant. The EFA report (MoEVT 2014a, pp. 147–152) lists the core curriculum objectives, and it is evident that they include a broad range of cognitive and non-cognitive skills, knowledge and values.

The first cohort of students to learn under the new curriculum is currently in Standard 6 (2015). This means that in 2015 both Standard 6 and Standard 7 students sat end-of-primary examinations. These two examinations are not equivalent by design (see Annex F for further information) and so results will not be comparable. Another relevant policy change is the establishment of the ZEC and the ZIE as autonomous bodies in 2012. ZEC is responsible solely for all standardised examinations given to school students at Standard 6, Standard 7 and Form 2 and to student teachers. ZEC works closely with ZIE, the organisation responsible for curriculum standards, and the Office of the Chief Inspector of Schools.

5.1.1 Overview of trend analysis

Data sources and interpretation

Apart from two sources of learning achievement data available from large-scale sample surveys which test primary school pupils, the main source available for assessing trends in student performance is from the standardised examinations given to all students at the end of Standard 7, Form 2, Form 4 and Form 6. All four examinations aim to serve both a selection purpose and as a means of monitoring learning achievement. This is difficult to achieve, and means that the interpretation of this data is not straightforward. Trends in examination pass rates may not closely reflect trends in underlying learning achievement. Some of the examinations are partly norm-referenced, meaning that the score needed to pass changes slightly each year so that the number of students qualifying for the next level of education remains similar (see Annex F for details on the pass rate criteria for each examination). There is also the question of whether the difficulty level of the examination is constant over time as intended. High volatility in pass rates between years is unlikely, even with a partly norm-referenced system, if examinations are testing similar content at a similar standard.

Even putting aside issues of the examination instrument, changes in performance may not directly reflect changes in the quality of education provided. For example, if access to education changes considerably over the period then the socioeconomic background of the tested students will probably reflect greater diversity, and this may influence performance beyond school factors. It is also important to highlight that results cover only students who are in the system, not the children who are out of school. Particularly for the Form 4 and Form 6 examinations, these results reflect the learning achievement of only a fraction of the population cohort.

Accepting that the relationship between schools’ contribution to student learning and examination results is complex, the descriptive analysis below gives a high-level barometer on school quality. It also highlights the consequences of performance in these assessments for individuals and collectively for the goals of the education system.

Trends in examination pass rates

Figure 33 gives an overview of pass rates in each of the four examinations over the past six years; these sit in a band of between 55% and 85% (except for Form 6 in 2013). The pass rate in each
examination is intended to reflect a recognised achievement level linked to curriculum standards, accepting that some adjustments are made to meet selection objectives.

**Figure 33: Examination pass rates (%), 2009 to 2014**

Source: EMIS/Statistical Abstract 2014; EMIS/Budget Tables 2015/16 (for Form 2 2014 result).

The Standard 7 and Form 2 pass rates show fairly steady trends over time, with Standard 7 falling by about 10 percentage points over the six years and Form 2 increasing by the same margin. By contrast, the Form 4 pass rate shows a lot of volatility. There was a steep drop in 2012, with the pass rate picking up in the last two years; however, it is still more than 20 percentage points lower than in 2010. The pass rate in the Form 6 examination fluctuated around 80% over the four years from 2010, and then jumped by 16 percentage points in 2013.

### 5.2 Primary school students' learning

The objective of the Standard 7 examination is to monitor learning achievement at the end of primary education, and to select roughly 5% of highest performing students for special schools (also called 'biased streams') in secondary education. The rest are automatically promoted regardless of examination performance. The examination is set by ZEC. An average score of 30% or above over four subjects is needed to pass the examination. (Annex F provides more details.)

The examination participation rate (the share of enrolled students who take the examination) is about 94% and the rate has remained fairly constant over the past six years. Some students may drop out within the school year during Standard 7 or be absent from the examination.

The pass rate in the Standard 7 examination fell to 73% in 2014, down from 85% in 2010. Over the same period, the access rate (a proxy for the proportion of the population cohort accessing each grade) to Standard 7 has been fairly stable (87% in 2010 and 89% in 2014 – see Chapter 2). If the examination is sufficiently valid and reliable over time, this probably indicates that learning achievement at primary level is declining.

Some 96% of Standard 7 students transitioned to Form 1 in 2014 (see Chapter 2), which – given the 2013 examination participation and pass rates – implies that more than 20% of students...

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21 This assumes that only public school students (from government-run schools) take the Standard 7 examination, as it is optional for private school students, who accounted for between 5% and 7% of enrolment over the period.
entering secondary education had failed the Standard 7 examination. Without a good foundation at primary level, this group of students are ill-equipped to benefit fully from the next stage of their education.

The variation in student performance by subject shown in Figure 34 is revealing.

**Figure 34:** Average scores in Standard 7 examination (%) by subject, 2010 and 2014

The first point to note from Figure 34 is that average scores are fairly low in all four subjects, if it is assumed that the assessment covers curriculum-related material that the students are supposed to have mastered. The highest average score out of the four subjects was 40% in 2014 for social science (a combination of civics, Islamic knowledge, history and geography). In both 2010 and 2014, comparative performance by subject is similar with average scores in mathematics being far the lowest (less than 15%). Performance in language (a combination of Arabic, English and Kiswahili) is the next weakest with average scores at around 25%. If data were available, it would be informative to analyse the range and distribution of test scores in order to understand, for example, if there is a sizeable group of particularly weak students pulling the average down or whether most students are struggling with these subjects.

Some explanation for the relatively poor achievement in mathematics and language at the end of primary education may be found in the results from an early years learning assessment that was carried out in 2013 (Tanzania 21st Century Basic Education Program, 2013). This study tested approximately 4,000 Standard 1 to 4 students in Kiswahili language and mathematics using a type of early grade reading and mathematics assessment that has been used in multiple countries in recent years (Early Grade Reading Assessment and Early Grade Mathematics Assessment).²² ²³

The Kiswahili Early Grade Reading Assessment results suggest that a sizable group of students are struggling to learn to read in the early years of schooling. After four years in school, 27% of students could not read a single word of a simple story passage. The comparable figures for the other Standards were 90% for Standard 1, 68% for Standard 2, and 44% for Standard 3.

²² See [www.eddataglobal.org/reading/](http://www.eddataglobal.org/reading/) and [www.eddataglobal.org/math/](http://www.eddataglobal.org/math/) for details on Early Grade Reading Assessment and Early Grade Mathematics Assessment objectives and instruments.

²³ Some caution needs to be taken in interpreting the results presented next. It seems likely that, given the size of the sample, the results are representative of early grade students in Zanzibar, but this has not been explicitly stated in the materials available in this study. The full report is not available to confirm this.
Findings from the Early Grade Mathematics Assessment indicate that students have basic counting skills, but that simple addition and subtraction is difficult even after four years. The highest number that students could count to in 60 seconds was 42, 57, 65 and 74 for Standard 1, 2, 3 and 4 students respectively. The Standard 4 students were able to get only nine addition sums and seven subtraction sums correct out of 20 questions each on average, while Standard 1 students could only manage two correct addition sums and one correct subtraction sum.

Another extremely useful piece of evidence on primary student learning levels comes from the SACMEQ assessment that was carried out in Zanzibar in 2000, 2007 and 2013. This is a rigorously designed regional learning assessment given to a representative sample of Standard 6 students in each country. It generates results on a standardised scale of learning competencies that are comparable over time and across countries. SACMEQ learning achievement results are currently available for 2000 and 2007 in two curriculum subjects: reading in Kiswahili and mathematics. There are eight levels of competency defined for each subject, but these have been collapsed into three groups (low, medium and high competency) in Figure 35 to reveal clear trends in the proportion of students achieving at each level in 2000 and 2007.

**Figure 35:** Proportion of Standard 6 students reaching reading and mathematics competencies (%) in 2000 and 2007

Source: Abdalla S.M. et al. (2011), pp. 78–80. Note: (1) In 2007 the figures shown for mathematics sum to 99%, this is because of rounding. The exact figures are 73.4% (low), 25.2% (medium) and 1.4% (high).

Students’ reading competency in Kiswahili improved markedly between 2000 and 2007, and the proportion reaching high-level competencies (described in the report as ‘students able to derive meaning from beyond text’) rose sharply from 11% to 42%. While this is clearly encouraging, the majority of students are still performing below this, with 20% of students in 2007 displaying low-level skills (‘mechanical foundation skills’) after six years in school. Overall, unless the situation has changed markedly since 2007, it appears that a large group of students at the end of primary school are competent readers in Kiswahili, so it may be performance in other languages which is driving the poor average scores in the Standard 7 language examination.

The SACMEQ mathematics results are consistent with the evidence from the other sources above which suggest that students struggle with this subject at primary level. In 2007, almost three-

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24 Results are comparable because the studies use methods based on item response theory (in particular, Rasch measurement). See [www.sacmeq.org](http://www.sacmeq.org) for more details.
quarters of Standard 6 students were found to have low-level mathematical skills on the SACMEQ assessment.

5.3 Ordinary secondary school students' learning

The section examines learning achievement for students who are studying in the four-year upper part of the basic education cycle (ordinary secondary level). There are two standardised examinations within this cycle, and these are discussed in turn below.

Form 2 students' learning

The Form 2 examination is set by ZEC and is a combination of written examination and continuous assessment. Its objective is to monitor the quality of ordinary secondary schooling, to select students to continue to Form 3, and to select students who will study science specifically. Students take 11 subjects and, prior to 2014, needed to pass overall to continue to Form 3. As of 2014 the requirement is that students must pass at least five subjects. (For more details see Annex F.)

Currently the students who fail the Form 2 examination either enter continuing education classes or sometimes VTCs, but many leave the system. These cohorts of students fall under the previous policy of compulsory basic education to Form 2. For the cohort of students who are studying under the new curriculum and will enter Form 1 in 2016, the intention is to ensure that none of these students leave the system after Form 2. The strategy to meet this objective is not yet clear.

Form 2 examination participation rates have been fairly steady over the past six years at about 93%, similar to Standard 7 participation rates. Again there may be some dropout within the Form 2 year or absenteeism from the examination.

In the five years 2009 to 2013, the overall Form 2 pass rate increased by five percentage points to reach 59% in 2013. In the following year, there was a sharp increase of six percentage points, giving a pass rate of 66% in 2014 (Figure 33). This change is probably explained by two main factors: first, the new pass rate criterion, which is easier to meet; second, the inclusion in the 2014 examination for the first time of public students from special schools and private school students.

Access rates to Form 2 are about 75% of the population cohort, which is a slight decline on earlier figures from 2010 (see Chapter 2), so it is important to bear in mind that about one-quarter of children are excluded from the Form 2 assessment. Presumably if these children were included then the results would be lower.

Some 57% of Form 2 students transitioned to Form 3 in 2014, which implies that, as intended, students who pass the Form 2 examination continue with their secondary studies (i.e. the transition, examination participation and pass rates are consistent). Overall it appears that the system has been in a fairly steady state over the past five years: about 45% of Form 2 enrolment leave the system (either fail the examination or do not take it), while 55% pass and enter Form 3.

Examination performance varies considerably by subject and over time, as Figure 36 highlights.

\[25\] Passing five subjects could include a combination of arts subjects, which students find comparatively easy.
It is striking that the highest average score out of all subjects in 2014 was 43% (for Kiswahili), and many subjects have far lower average scores than this. Assuming that the examination reflects curriculum content at an appropriate level, this implies that many students are struggling to master the skills and knowledge expected or that the assessment is not enabling students to demonstrate their skills because of, for example, English language barriers or the format of the assessment.

The issue of the role of language in Form 2 examination performance was the subject of a substantial piece of research and series of studies (see, for example, Rea-Dickens et al., 2009).

The main findings from the research (Rea-Dickens and Yu, 2012) demonstrated some consistent significant effects of language and English language proficiency on examination performance. It also found that ‘national examinations are not aligned with classroom realities’ in the use of language because actual classroom learning typically involves two languages while the examinations are in one (English). The study’s classroom observations from a limited number of secondary schools found ‘overwhelming evidence of: dual language use in classrooms, hesitant English language use by some English language and subject teachers, hesitant spoken English by the majority of pupils, and few opportunities to write spontaneous English’.

The study’s main conclusion was that the ‘one language policy does not give all students a fair chance or lead to valid assessment of all students’. It recommended changing the system of assessments to take account of the dual language use in classrooms. While this recommendation has not been implemented, the recognition that poor English language skills are a barrier to examination performance, and learning achievement more broadly, is widely acknowledged. One of the most significant changes in policy in recent years has been the introduction of English language as a medium of instruction in the upper grades of primary school. It is anticipated that this extra exposure to learning in English will improve learning achievement at secondary level and minimise the disadvantage of poor English language skills picked up by the research. The first cohort to study under this system will enter secondary school in 2016. ZIE is hoping that the two cohorts can be separated in secondary schools and their progress measured and compared.

The other general observation from Figure 36 is that there are some large changes in average subject scores over time. The size of these changes over a five-year period for chemistry, Arabic and history seem particularly unlikely as a reflection of underlying student skills and knowledge.
As with the pattern observed in the Standard 7 examination, average mathematics scores are by far the lowest of all subjects (less than 15% in both years). Given that most students did not acquire a solid foundation in basic mathematics at primary level, it is not surprising that performance at higher levels is also weak. More advanced mathematics builds on basic concepts and skills.

It is also evident from Figure 36 that average science scores are lower than almost all the scores in arts subjects. Students appear to be struggling more with science and mathematics subjects than with languages, humanities and other arts subjects.

**Form 4**

At the end of Form 4, students take a Tanzania-wide examination which is set by the NECTA. The examination is used to select students for further studies in Form 5 or for further training institutions, and as a qualification for the job market. It aims to assess whether students have acquired the skills and knowledge stipulated in the ordinary-level curriculum. Students sit between eight and 10 subjects, and are required to pass five subjects (including three credit grades) in order to transition to Form 5. (More details are in Annex F.)

There is close to full participation of enrolled students in the Form 4 examination across public and private schools, which suggests that within-year dropout at Form 4 level is minimal. The volatility of the Form 4 pass rate over the past six years is clear from Figure 33 shown earlier, but the overall trend is very clearly downwards. By 2014 the pass rate was 59%, more than 20 percentage points lower than in 2009, and it dipped as far as 52% in 2012. The level of fluctuation and the magnitude of change over a six year period raise questions about how closely these results reflect movements in underlying learning achievement.

Access rates to Form 4 are estimated to be about 43% of the population cohort in 2014, so more than half of each cohort is currently excluded from this assessment.

The proportion of candidates with sufficiently high passes to qualify for Form 5 is far lower than the overall pass rate. In 2014, the pass rate for public school students was 57%, but only 13% passed well enough to continue to Form 5. There has been a lot of volatility in this qualifying pass rate over the past six years. Figure 37 shows that in 2011 and 2012 only about 5% of public students met the criterion to transition, while in 2013 19% did. It seems unlikely that this level of change accurately reflects differences in the ability of different student cohorts over such a short space of time. Given the high-stakes nature of this examination, such fluctuations have profound consequences for the future prospects of individual students and collectively for the external efficiency of the system. This also translates into large differences in absolute number of students entering Form 5 each year, which makes it challenging to utilise key resources such as teachers and buildings efficiently.

Students in private schools account for less than 10% of the total at ordinary secondary level, and it is unlikely that the background characteristics of students in the two sectors are comparable. Private school students outperform public school students in achieving a high enough pass rate to continue to Form 5 by a considerable margin, and Figure 37 shows this gap growing.
Figure 37: Form 4 examination pass rate (%) high enough to enter Form 5, by public and private school students, 2009 to 2014


About 6% of Form 4 students in 2013 made the transition to Form 5 in 2014 (see Chapter 2), which is inconsistent with the very high examination participation rate and the reported 19% of candidates achieving a high enough pass rate to qualify. Upon further enquiry, the explanation is that some students who qualify for Form 5 are opting instead to enter colleges to study for a one-year certificate followed by a two-year diploma. A visit to a secondary school in North B district corroborated this: of the seven students who had qualified for Form 5 in 2014, six were in college studying and only one was in Form 5.

As well as serving school candidates, the Form 4 examination is open to private, non-school candidates. In 2014, these 4,600 private candidates accounted for 27% of the total. Pass rates for private candidates are well below those of school candidates at 41% in 2014.

In 2013 a study was carried out to try to understand underlying reasons for the decline in performance in the Form 4 examination (MoEVT, 2013b), probably prompted by nationwide alarm over the failure of such a large proportion of Form 4 students in 2012. Some of the key reasons identified by stakeholders in this study are summarised in Box 10.
Box 10: Summary of views of stakeholders on reasons for poor Form 4 examination performance

<table>
<thead>
<tr>
<th>Reason</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shortage of qualified, competent teachers</strong></td>
<td>related to reasons discussed in Chapter 6 on teacher management. One particular issue highlighted was the perception that teachers are failing to teach students good techniques for answering exam questions. Students perform poorly on questions requiring longer, structured answers.</td>
</tr>
<tr>
<td><strong>Limited teaching time</strong></td>
<td>related to reasons discussed in Chapter 6 on teacher management, means that the syllabus is often not completed.</td>
</tr>
<tr>
<td><strong>Low teacher motivation</strong></td>
<td>partly related to working conditions discussed in Chapter 6 on teacher management, manifests itself in high teacher absenteeism, and low teaching effort until Form 4, when extra effort is made to try to finish the syllabus but this is often too late.</td>
</tr>
<tr>
<td><strong>Poor resources and infrastructure</strong></td>
<td>highlighted in Chapter 6 in relation to classrooms, but also that the relevance of textbooks used in Zanzibar to material that is covered in examinations is low. Zanzibar and the mainland share a curriculum but use different textbooks.</td>
</tr>
<tr>
<td><strong>Failure of education system at earlier stages and difficulties created by English language instruction</strong></td>
<td>Some of the key issues highlighted were: (i) earlier exams at school, including the Form 2 exam, do not conform to the structure of the Form 4 exam, and so students are given little opportunity to develop their examination skills; (ii) the poor English skills of students and teachers; (iii) although English is the medium of instruction, in practice teaching takes place in both English and Kiswahili; and (iv) poor command of English prevents students from understanding exam questions and from answering correctly, especially if a detailed descriptive answer is required.</td>
</tr>
<tr>
<td><strong>Ineffective inspection and poor monitoring and evaluation of interventions</strong></td>
<td>partly related to issues discussed in Chapter 7 on system capacity. One key issue mentioned was that continuous assessment is not used systematically to monitor and evaluate pupil performance at school level in order to identify students falling behind and take remedial action before the Form 2 or Form 4 examinations.</td>
</tr>
<tr>
<td><strong>Communication failures between the MoEVT, district level management and schools</strong></td>
<td>Citing particularly that changes in exam format and the curriculum are not well communicated to schools, teachers or students.</td>
</tr>
<tr>
<td><strong>Weak school management and inadequate level of collaboration with parents</strong></td>
<td>Source: MoEVT, 2013b.</td>
</tr>
</tbody>
</table>

Other quantitative research used a value-added model to investigate the factors which explain Form 4 examination performance (Salim, 2012). The study found that schools matter, and, more specifically, that teachers matter, both in terms of their level of education and their professional practices: after controlling for prior attainment and factors outside school control (personal and background characteristics), school factors were significant in explaining variation in Form 4 results. Of particularly positive significance were regular marking of homework, use of continuous assessment, and the presence of experienced and well-qualified teachers.\(^{26}\)

Another finding from the value-added study, relevant for the assessment system, is that the correlation between students’ Form 2 and Form 4 results was low compared with similar analysis for many other countries. This raises validity questions in relation to these assessments.

5.4 Advanced secondary students’ learning

At the end of Form 6, students take a Tanzania-wide examination which is set by the NECTA. The examination is used to select students for university entrance or other tertiary education places and as a qualification for the jobs market. It aims to assess whether students have acquired the skills and knowledge stipulated in the advanced-level curriculum. Students sit four subjects, and require a high pass in order to qualify for university (see Chapter 10 for details of entrance requirements). (More details on the Form 6 examination are in Annex F.)

\(^{26}\) Note that the teacher practice factors (regular marking etc.) were not directly observed; head teachers’ perceptions of these processes were used as a proxy.
There is close to full participation of enrolled students in the Form 6 examination across public and private schools, according to latest available figures from two years ago. The overall pass rate fluctuated around 80% between 2009 and 2012, but then jumped by more than 15 percentage points to 96% in 2013. It is unclear what the underlying reasons are for such a large jump.

The access rate to Form 6 is considerably less than 10% of the population cohort, but the exact figure has fluctuated in recent years partly because of volatility in performance in the Form 4 examination. It appears to be around 4% in 2014, down from 8% in 2010. This means that performance in the Form 6 examination reflects the achievement of the very small group of young people who, along with their peers studying in colleges for diplomas, have survived at least 13 years in the education system.

Form 6 examination passes are classified by division. Figure 38 reveals that the share of students achieving each division has changed a fair amount since 2009/10. Achieving the two highest divisions (I and II) was rare in the first four years, with less than 10% of candidates performing at this level, but jumped to 20% in 2013/14. Obtaining a Division III pass is typical; between 45–55% of candidates are awarded this level each year.

Figure 38: Form 6 pass rate by division (%), 2009/10 to 2013/14

Private non-school candidates accounted for 37% of all candidates in 2013/14. At 28% the pass rate for these 688 private students was much lower than for school students.

5.5 Conclusion

Levels of learning achievement are low at the primary and ordinary secondary level particularly. The majority of students are not acquiring the skills and knowledge stipulated in the basic education curriculum. The direct consequence of this in the secondary cycle is that a very large proportion of students leave the schooling system before the end of the cycle. A small minority are achieving well at all levels.

Both teachers’ level of experience and qualification, as well as their professional practices – including marking homework and use of continuous assessment – are important factors linked with learning achievement at Form 4 level.
The assessment system itself is problematic. The volatility in the externally set examination pass rates and pass rates by division over time, when access has not been shifting dramatically, raises questions about the validity and reliability of the test instruments over time. It seems unlikely that there is such volatility in the underlying skills and knowledge of students. The large variations in average scores in the internally set examinations in some subjects raise similar concern.

There are perceptions from informed stakeholders that the nature of the Form 4 assessment (type of questions and language) is a considerable barrier for many students in demonstrating their knowledge and skills. This merits further investigation, as it raises the fundamental question of what the assessments are currently measuring.

The consequences for the life-chances of individuals, and collectively for the external efficiency of the education system, are profoundly affected by the system of assessment, and so concerns about its effectiveness need to be taken very seriously. A comprehensive review of the assessment system is warranted, including analytical work on recent examination data to establish if the instruments are fit-for-purpose.
6 Teacher management, classrooms and other resource availability

Box 11: Key findings on teachers, classrooms and other resources

Teachers

- There are sufficient numbers of teachers at every level and the vast majority have a teaching qualification.
- Projections of supply of and demand for primary and secondary teachers indicate numbers graduating are likely to be sufficient in the medium-term.
- There are quality issues, including a possible shortage of trained pre-primary teachers qualified to teach at that level, and limited numbers of mathematics and science teachers; in addition, most teachers have a very limited grasp of English, the language of instruction for five subjects at upper primary and all subjects in secondary.
- The motivation and morale of serving teachers is giving cause for concern.
- Processes for assessing teacher need and deploying recruited teachers are opaque and the recruitment process needs more educational input.
- The utilisation of serving teachers in schools is inefficient. There are a number of causes: at all levels, a shortage of classrooms restricts the number of classes and this reduces the number of contact hours; at primary level teachers of Standards 1–4 who should teach whole classes, do not.
- In-service pedagogical support through TCs and distance and e-learning courses for serving teachers all show promise but the TCs need greater resources to help their work.

Classrooms

- Given plans to expand the pre-primary system substantially, many additional classrooms will be needed: about 140 classrooms per year to 2020.
- There is an acute shortage of primary classrooms. Currently, there are 47 students per class on average, and 39% of classrooms are used for double-shifting.
- About 60 new primary classrooms need to be constructed per year until 2020 simply to keep up with population growth.
- There is a wide geographical disparity in the availability of classrooms in primary schools. The pupil to classroom ratio ranges from 41:1 in South District Unguja to 92:1 in Micheweni District in Pemba (public and private combined).
- The double-cohort due to enter Form 1 in 2016 will put enormous pressure on the physical infrastructure. Under current conditions, about 150 additional classrooms will be needed per year up to 2020 to cope with this.
- There is a wide geographical disparity in the availability of classrooms in secondary schools: the pupil to classroom ratio ranges from 34:1 in South District to 64:1 in Urban district (public and private combined).

6.1 Current teacher numbers and their qualifications

There were 10,369 teachers in government schools (also termed ‘public’ schools) in 2014: 408 in pre-primary; 6,274 in primary and 3,687 in secondary schools. This is up from a total of 10,313 in 2012. The number of teachers in private schools is much lower than in public schools, except in pre-primary, where the number of teachers and pupils is greater in the private sector. This is shown in Table 11.
Table 11: Teachers in government and private schools 2012–14 by level

<table>
<thead>
<tr>
<th>Level</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary</td>
<td>376</td>
<td>1145</td>
<td>381</td>
</tr>
<tr>
<td>Primary</td>
<td>6770</td>
<td>850</td>
<td>6391</td>
</tr>
<tr>
<td>Secondary</td>
<td>3267</td>
<td>480</td>
<td>3464</td>
</tr>
<tr>
<td>Total</td>
<td>10,313</td>
<td>2,475</td>
<td>10,236</td>
</tr>
</tbody>
</table>


Over the past 10 years the share of qualified teachers in government schools has been growing at all levels. Figure 39 shows the share of qualified teachers at the three levels. Note that there are very few unqualified teachers at any of the three levels. The share of diploma-level teachers at primary level now is 25% and only 1% are untrained. Ten years ago only 5% had a diploma and 13% were untrained (Education Situation Analysis 2007, ZEDCO 2007).

Figure 39: Distribution of teachers in government schools by qualification at different levels of education, 2014

Despite the improvements in share and qualification levels of those trained, there are questions about the appropriateness of the training and these will be further examined below. First, the current provision of teachers will be examined.
6.2 Current providers of teacher education

Five institutions currently offer pre-service teacher education in Zanzibar: two universities, SUZA and Abdul Rahman Al-Sumait Memorial University (SUMAIT), and three TTCs – BW Mkapa TTC and Pemba Islamic College, each on Pemba, and the Mazizini Islamic College on Unguja. In addition, the Teacher Education Department of the MoEVT delivers a three-year distance education in-service course leading to a Certificate A in primary teaching. There are three levels of qualification for teachers: certificate, diploma and degree (a Certificate in Primary Education, Certificate A after three years' study and Certificate B after two years' study, a Diploma in Primary or Secondary Education taken post-A-level or post-certificate and for two years of study, and a three-year degree).

Table 12: Institutions offering different courses for teachers in Zanzibar

<table>
<thead>
<tr>
<th>Institution</th>
<th>Qualification level</th>
<th>Certificate Primary</th>
<th>Diploma Primary</th>
<th>Diploma Secondary</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>BW Mkapa TTC</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mazizini Islamic College</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pemba Islamic College</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUZA</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SUMAIT</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Teacher Education Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Authors.

6.2.1 Diplomas in Education

The three TTCs had 573 student teachers studying on the Diploma in Primary Education, 60 on the Diploma in Secondary Education, and 42 on a Certificate in Inclusive Education in 2015. These are shown in Annex G. Until 2014, all applications for entry to the three TTCs went through MoEVT. However, the Zanzibar Education Policy states that the three TTCs will be absorbed into SUZA and BW Mkapa was absorbed in 2015. Presumably, entry to the three TTCs will be via SUZA from now on. The National Council for Technical Education (NACTE) student guide for teachers colleges in 2015 lists none of the three TTCs in Zanzibar.

In 2015 BW Mkapa graduated 93 from its Diploma in Primary Education and 24 from its Diploma in Secondary Education and it can be estimated that the three TTCs are likely to graduate over 250 students with the Diploma in Primary Education and over 40 with the Diploma in Secondary Education, including 16 in the Diploma in Secondary Education (Arabic and Islamic Knowledge).

In addition to the three TTCs, SUZA and SUMAIT also offer diploma courses. SUZA offers three diplomas: a Diploma in Language with Education; a Diploma in Science with Education; and a Diploma in Education Leadership and Management. The latter is aimed at school head teachers and deputy head teachers.

Annex G shows the numbers enrolled in all education courses (including degrees) in the two universities.

In 2014 SUZA graduated 304 diploma holders, of whom 206 had the Diploma in Language with Education, 43 had the Diploma in Science with Education, and 55 had a Diploma in Leadership and Management. We were informed that SUMAIT has begun to offer a certificate and diploma in
Pre-Primary Education but could not confirm this. It does, however, offer a pre-university course (PUC) for those who do not have the required entry-level qualifications.

### 6.2.2 Certificate-level courses

The department of teacher education also runs a distance education course for untrained teachers to help them to gain a Grade III A Certificate. Table 13 shows the number gaining certificates from this course in four batches over the past 18 years. As can be seen, 1,444 gained certificates and almost 70% of these were female.

**Table 13: Distance education course enrolment and graduates since 1997**

<table>
<thead>
<tr>
<th>Years</th>
<th>Enrolment</th>
<th>Awarded certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1997–2004</td>
<td>185</td>
<td>279</td>
</tr>
<tr>
<td>2005–2008</td>
<td>110</td>
<td>378</td>
</tr>
<tr>
<td>2010–2013</td>
<td>120</td>
<td>563</td>
</tr>
<tr>
<td>Total</td>
<td>415</td>
<td>1,210</td>
</tr>
</tbody>
</table>

Source: MoEVT Department of Teacher Education.

Currently there are another 695 teachers enrolled on the third year of the certificate, and going on past rates, an estimated 650 of these will pass the examination in 2015 and gain their qualification early in 2016.

### 6.2.3 Degrees in Education

In addition to certificates and diplomas, SUZA and SUMAIT also offer degrees in Education. These are: a BA with Education, a BSc with Education, a BA Kiswahili with Education, and a BSc in IT with Education in SUZA; or a BA with Education or BSc with Education and 15 two-subject options for a BA Education and six two-subject options for a BSc Education in SUMAIT. The numbers enrolled over the past three years are shown in Annex G.

A total of almost 800 are in the final year of the BA with Education degree while 55 are in the final year of the BSc with Education degree.

### 6.3 Observations on teacher supply

There are very few courses currently training pre-primary teachers, though at least four are planned. Teachers serving in pre-primary schools have primary training and are receiving in-service support. The share of private providers is very high and private providers tend to have a higher share of untrained teachers than the Government does.

The number of certificate courses in TTCs has been declining and there is discussion of changing the distance education course to a diploma.

There are two main observations on entry-level qualifications. First, at all levels there are second-chance options. Unqualified teachers study at a distance and gain a Grade IIIA Certificate or go to one of the Muslim academies to study. They then go back to their school or choose another school to teach in. As is further described in Chapter 10, where students do not have the entry requirements to enter the diploma programme then a good certificate together with three CSEE-level passes gets them into the diploma. Where students do not have the necessary entry
requirements for a degree (five passes and at least two principal passes at CSEE level and minimum points of 4.5) then a good diploma at second class level gets then entry to a degree in SUZA. In SUMAIT, those who do not have the entry requirements of two principal passes at A-level and a total points level not below 2 can take a PUC; if they pass this, they are admitted to the degree programme.

A second observation is that it is not clear that a degree, diploma or certificate in teaching represents a particular level of knowledge or skill in teaching. Each university has different entry requirements and provide education courses in different ways. It would be interesting to examine the language and pedagogical skills of graduates from the different universities in Zanzibar. A similar exercise could be conducted for diploma and certificate holders.

###  6.4 How many teachers does Zanzibar need?

Full details explaining the assumptions underpinning the projections in this section are in Annex G. The model projects enrolment based on assumptions about growth in the school-age population combined with assumptions about access rates to each level of education and internal efficiency parameters. The following subsections discuss teacher projections; the classroom projections are explained in the second part of this chapter.

#### 6.4.1 At pre-primary level?

The following tables show the estimates of teachers needed by level in Zanzibar. Projections assume the status quo and are based on current government and private enrolment projections. The 'Base' scenario assumes that the current ratio of pupils to class (38:1) and teacher numbers per class (1.6:1) will remain the same. In these circumstances about 100 new teachers should be recruited each year.

**Table 14: Projections of teacher needs for pre-primary, 2015 to 2020**

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Projected</th>
<th>Average p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-PRIMARY (Public and Private)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A. BASE SCENARIO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>38,808</td>
<td>39,905</td>
<td>41,032</td>
</tr>
<tr>
<td>Classes</td>
<td>1,035</td>
<td>1,064</td>
<td>1,094</td>
</tr>
<tr>
<td>Teachers</td>
<td>1,704</td>
<td>1,752</td>
<td>1,802</td>
</tr>
<tr>
<td>Classrooms</td>
<td>1018</td>
<td>1047</td>
<td>1076</td>
</tr>
<tr>
<td><strong>Annual needs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New teachers</td>
<td>99</td>
<td>102</td>
<td>105</td>
</tr>
<tr>
<td>New classrooms</td>
<td>29</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td><strong>Assumptions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Students:</em> (i) School-age population growth of 2.6% per annum; (ii) Constant 2014 rates GER (32%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Teachers:</em> (i) Constant 2014 ratios for Students per class (37.5) and Teachers per class (1.6); (ii) Attrition of 3% p.a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Classrooms:</em> Constant 2014 ratios for Students per class (37.5) and Classrooms per class (0.98), 2% of classrooms being used for doubleshifting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. IMPROVEMENT SCENARIO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>38,808</td>
<td>43,304</td>
<td>48,321</td>
</tr>
<tr>
<td>Classes</td>
<td>1,035</td>
<td>1,154</td>
<td>1,288</td>
</tr>
<tr>
<td>Teachers</td>
<td>1,704</td>
<td>1,901</td>
<td>2,122</td>
</tr>
<tr>
<td>Classrooms</td>
<td>1,018</td>
<td>1,136</td>
<td>1,268</td>
</tr>
<tr>
<td><strong>Annual needs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New teachers</td>
<td>249</td>
<td>277</td>
<td>309</td>
</tr>
<tr>
<td>New classrooms</td>
<td>138</td>
<td>132</td>
<td>147</td>
</tr>
<tr>
<td><strong>Assumptions (changes in bold)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Students:</em> (i) School-age population growth of 2.6% per annum; (ii) Increase GER from 32% to 50% by 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Teachers:</em> (i) Constant 2014 ratios for Students per class (37.5) and Teachers per class (1.6); (ii) Attrition of 3% p.a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Classrooms:</em> Constant 2014 ratios for Students per class (37.5) and Classrooms per class (0.98), 2% of classrooms being used for doubleshifting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors, using EMIS data.
The 'Improvement' scenario shows the number of teachers (and classrooms) needed if pupil numbers reach 50% gross enrolment in all pre-primary schools, government and private. In these circumstances, the demand for pre-primary teachers will increase to 305 a year.

As has been discussed, the only pre-primary teachers courses currently being delivered in Zanzibar are being provided in SUMAIT. A pre-primary diploma has just started in SUZA, in November 2015, and a degree is planned for 2017; in addition, Mazizini Islamic College is planning to start a Certificate in ECE. An e-learning course delivered by the Teacher Education and E-learning Unit has also just begun. Numbers graduating from these courses, however, are likely to be too small to meet the demand for new teachers in the short-term, particularly if the MoEVT continues to expand pre-primary provision. In addition to the requirements for new teachers is the requirement for most of the current 1,704 teachers to learn pre-primary methods. This is an immediate and urgent problem to address.

Finally, given the RoGZ commitment to providing pre-primary for all, it is likely that the share of private providers will decrease and the fiduciary burden on RoGZ will increase. This is further explained in Chapter 4.

### 6.4.2 At primary level?

The table below shows the projected numbers of teachers (and classrooms) needed in primary schools. The 'Base' scenario assumes no changes in pupil to class (47:1) and teacher to class ratios (1.4:1, implying an average weekly teaching load of 28 periods per teacher). In these circumstances about 200 new teachers are needed annually in primary schools; as explained, the current annual supply of qualified primary teachers from TTCs is over 200, with an additional 200 on average from the distance education course. Should the distance education course continue and the status quo prevail then the number of primary teachers qualifying will be greater than the number needed. However, as the graduates from the distance education course are already serving as teachers, the quality of teaching should improve without any change in the pupil to teacher ratio.
Table 15: Projections of teacher needs for primary, 2015 to 2020

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Projected</th>
<th>Average p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY (Public and Private)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. BASE SCENARIO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>252,938</td>
<td>257,041</td>
<td>232,428</td>
</tr>
<tr>
<td>Classes</td>
<td>5,374</td>
<td>5,461</td>
<td>4,938</td>
</tr>
<tr>
<td>Teachers</td>
<td>7,352</td>
<td>7,471</td>
<td>6,756</td>
</tr>
<tr>
<td>New teachers</td>
<td>340</td>
<td>-491</td>
<td>339</td>
</tr>
<tr>
<td>New classrooms</td>
<td>62</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>Annual needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Teachers: (i)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Classrooms:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. IMPROVEMENT SCENARIO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>252,938</td>
<td>257,041</td>
<td>232,428</td>
</tr>
<tr>
<td>Classes</td>
<td>5,374</td>
<td>5,605</td>
<td>5,202</td>
</tr>
<tr>
<td>Teachers</td>
<td>7,352</td>
<td>7,668</td>
<td>7,117</td>
</tr>
<tr>
<td>Classrooms</td>
<td>3,795</td>
<td>3,958</td>
<td>3,674</td>
</tr>
<tr>
<td>New teachers</td>
<td>537</td>
<td>-321</td>
<td>548</td>
</tr>
<tr>
<td>New classrooms</td>
<td>163</td>
<td>0</td>
<td>173</td>
</tr>
</tbody>
</table>

Source: Authors, using EMIS data.

The 'Improvement' scenario shows needs where the number of pupils per class reduces to 40 and teachers per class ratio remains at 1.4:1; in this case, the number of teachers needed annually will exceed 400 and the supply of new teachers will be inadequate. In addition to the demand for new teachers is the demand to provide current serving teachers with the skills to cope with the new policy – teaching four subjects through English in Standards 5 and 6.

6.4.3 At secondary level?

In regard to secondary, the 'Base' case projections of numbers of teachers (1.9 per class and classrooms (37 pupils per class) needed show that about 375 new teachers are required each year; the numbers coming out of the TTCs and universities is over 1,000 annually. Where transition rates improve to 80% between Form 2 and Form 3, and to 20% between Form 4 and 5, and where students per class is 40 and teachers per class 1.9, then the annual need for new teachers will reach 499. However, as has been described, the numbers coming out of the universities are greatly in excess of even this number. In addition, an unknown number of students are gaining teaching qualifications in institutions on mainland Tanzania and some of these will join the teaching force in Zanzibar.
Table 16: Projections of teacher needs for secondary, 2015 to 2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SECONDARY (Public and Private)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BASE SCENARIO</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>81,621</td>
<td>83,876</td>
<td>116,825</td>
<td>119,639</td>
<td>113,479</td>
<td>117,011</td>
<td>106,202</td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>2,169</td>
<td>2,229</td>
<td>3,105</td>
<td>3,180</td>
<td>3,016</td>
<td>3,110</td>
<td>2,823</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>4,215</td>
<td>4,331</td>
<td>6,033</td>
<td>6,178</td>
<td>5,860</td>
<td>6,043</td>
<td>5,484</td>
<td></td>
</tr>
<tr>
<td>Classrooms</td>
<td>1,797</td>
<td>1,847</td>
<td>2,572</td>
<td>2,634</td>
<td>2,498</td>
<td>2,576</td>
<td>2,338</td>
<td></td>
</tr>
<tr>
<td><strong>Annual needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New teachers</td>
<td>243</td>
<td>1831</td>
<td>326</td>
<td>-133</td>
<td>358</td>
<td>-377</td>
<td>375</td>
<td>152</td>
</tr>
<tr>
<td>New classrooms</td>
<td>50</td>
<td>725</td>
<td>62</td>
<td>0</td>
<td>78</td>
<td>0</td>
<td>152</td>
<td></td>
</tr>
<tr>
<td><strong>Assumptions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Students:</em> (i) School-age population growth of 2.6% per annum; (ii) Constant 2014 rates for intake and student flow rates in public schools; (iii) Constant 2014 private share of total enrolment (8% at Ordinary and 14% at Upper)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Teachers:</em> (i) Constant 2014 ratios for Students per class (37.6) and Teachers per class (1.9); (ii) Attrition of 3% p.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Classrooms:</em> Constant 2014 ratios for Students per class (37.6) and Classrooms per class (0.8), 20% of classrooms being used for doubleshifting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IMPROVEMENT SCENARIO</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>81,621</td>
<td>84,974</td>
<td>120,359</td>
<td>126,140</td>
<td>127,221</td>
<td>134,693</td>
<td>127,483</td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>2,169</td>
<td>2,323</td>
<td>3,133</td>
<td>3,250</td>
<td>3,245</td>
<td>3,401</td>
<td>3,187</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>4,215</td>
<td>4,343</td>
<td>6,088</td>
<td>6,315</td>
<td>6,305</td>
<td>6,609</td>
<td>6,193</td>
<td></td>
</tr>
<tr>
<td>Classrooms</td>
<td>1,797</td>
<td>1,852</td>
<td>2,596</td>
<td>2,692</td>
<td>2,688</td>
<td>2,818</td>
<td>2,640</td>
<td></td>
</tr>
<tr>
<td><strong>Annual needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New teachers</td>
<td>254</td>
<td>1875</td>
<td>409</td>
<td>180</td>
<td>493</td>
<td>-218</td>
<td>499</td>
<td></td>
</tr>
<tr>
<td>New classrooms</td>
<td>55</td>
<td>744</td>
<td>97</td>
<td>0</td>
<td>129</td>
<td>0</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td><strong>Assumptions (changes in bold)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Students:</em> (i) School-age population growth of 2.6% per annum; (ii) Increase transition rate from F2 to F3 from 57% (2014) to 80% by 2020 and from F5 to F6 from 6% (2014) to 20% by 2020 in public schools; (iii) Constant 2014 private share of total enrolment (8% at Ordinary and 14% at Upper)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Teachers:</em> (i) Increase ratios for Students per class to 40:1 by 2020 and Teachers per class (1.9); (ii) Attrition of 3% p.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Classrooms:</em> Increase ratios for Students per class to 40:1 by 2020 and Classrooms per class (0.8), 20% of classrooms being used for doubleshifting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors, using EMIS data.

Note that the unusually high numbers of new teachers required in 2015 is because of the double-cohort of students entering Form 1 in 2016.

At secondary level the supply of teacher numbers is not the problem; it is the supply of teachers with appropriate qualifications, particularly mathematics and science, and with English language skills.

The average number of qualified teachers can be estimated based on current suppliers and these estimates are shown in Table 17 below.

In summary, it appears that each year Zanzibar is producing over 800 education graduates with degrees, another 500 with diplomas in primary and secondary education, and about 200 annually with certificates (over 600 teachers with certificates from the distance education course every three years). As can be seen, however, the numbers with pre-primary qualifications are currently very low and current plans are unlikely to meet demand.
Table 17: Estimate of annual teacher supply and possible demand at certificate, diploma and education degree level by provider in 2015

<table>
<thead>
<tr>
<th>Level</th>
<th>Institution type</th>
<th>Teacher Education Dep.</th>
<th>TTC</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary</td>
<td></td>
<td></td>
<td>Not known</td>
<td>100–300</td>
</tr>
<tr>
<td>Primary</td>
<td>Certificate</td>
<td>200</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>250</td>
<td>200–400</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>Diploma</td>
<td>41</td>
<td>250</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Degree (with maths and science)</td>
<td>855 (55)</td>
<td>400–500 (200–250)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author calculations. Note that the estimate for mathematics and science is based on the share of periods recommended for mathematics and science teaching.

The remainder of this section on teachers discusses the quality of provision of teachers, needs assessment, recruitment, deployment and utilisation practices as well as teacher morale motivation and behaviour. The observations are based on our own analysis but also on two important studies: (i) Report on Study of Management of Entrants to Teacher Training, Teacher Requirements, Recruitment and Deployment Trends and Teacher Working Conditions in Zanzibar, MoEVT July 2013; and (ii) Report on Views of Education Stakeholders on the Causal Factors of Poor Examination Performance at CSEE, MoEVT June 2013. The section concludes with some observations on current in-service provision.

6.5 Quality of teacher training provision at the three levels

While it has not been possible for the situation analysis to assess the quality of training provided at certificate, diploma or degree level, a number of observations can be made. At pre-primary level, specialist pre-primary teacher education courses have just begun to be provided in Zanzibar and it will take a number of years for these to supply the numbers required. Two options are needed, one to allow serving but unqualified teachers to teach at pre-primary level, either using distance or weekend release methods, but certified by a reputable accreditation body (as described later, this is underway); the second is for new entrants – this should be provided by both of the universities and should lead to a diploma in pre-primary education. It would be useful if the courses being provided across the different institutions conformed to the same curriculum.

At primary level, courses using distance education methods for serving teachers and in TTCs for pre-service have a long history. However, given the transfer of TTCs to SUZA and the level of the Certificate, now may be the time to question: (i) the future place of certificate-level training for Primary Education – the Distance Education course could be restructured to become a Diploma, perhaps focusing on pre-primary; (ii) the future role of the universities in providing Diplomas in Primary Education; and (iii) the types of courses to be offered. Given the specialisation and teaching through English at upper levels of the primary curriculum and the MoEVT policy that early Standards should be taught in whole class groups, courses recognising these realities and also the large class realities should be considered.

At secondary level, while the number of degree holders with education exceeds the likely demand for teachers in secondary schools, there are serious questions to be answered in regard to the
quality of the teaching being provided. The most obvious result of this is the large number of students leaving after the Form 2 examinations and the poor results at Form 4 in the CSEE. One cause of poor student performance is the poor teaching of Science subjects in particular. The study into the causes of poor performance in the CSEE found: ‘this is particularly the case for mathematics and science subjects. In terms of competency it was noted … that even where teachers are technically qualified, they often display poor teaching methodology and in some cases are ignorant in areas of subject content.’ One solution may be to intensify the efforts to produce good science teachers. (See, for example, the report on the study to identify arts subject teachers with the potential of teaching science at secondary level so as to upgrade and convert them to full science teachers – MoEVT 2015.)

A second problem is poor English language skills. Again, the study into the causes of poor performance in the CSEE found: ‘All stakeholders also identified the poor English skills of both students and teachers as a prominent cause of exam failure. Although English is technically the language of instruction, limited English language competency of both teachers and student leads to teaching taking place in both English and Swahili.’ It will be necessary to address this lack in all teachers’ courses also.

Both of these problems at secondary level – inadequate preparation of mathematics and science teachers, and poor English language skills – requires attention by those institutions providing teacher preparation courses at this level.

### 6.6 Deployment of teachers: are teachers where they are needed?

Across Africa, countries have problems getting teachers into the more remote schools. While Zanzibar is relatively small, it appears that the same problem is manifest here too. Table 18 shows the number of teachers in relation to the number of pupils across Zanzibar’s districts. As can be seen, no Pemba district has lower pupil to teacher ratios at primary and secondary level than any district in Unguja.

Table 18: Pupil to Teacher ratios across Zanzibar’s districts 2014

<table>
<thead>
<tr>
<th>District</th>
<th>Pre-primary</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2014</td>
<td>2014</td>
</tr>
<tr>
<td>Urban</td>
<td>17.3</td>
<td>28.3</td>
<td>20.5</td>
</tr>
<tr>
<td>West</td>
<td>24.9</td>
<td>40.6</td>
<td>20.5</td>
</tr>
<tr>
<td>North A</td>
<td>18.0</td>
<td>34.0</td>
<td>18.3</td>
</tr>
<tr>
<td>North B</td>
<td>16.7</td>
<td>24.2</td>
<td>16.5</td>
</tr>
<tr>
<td>Central</td>
<td>18.9</td>
<td>27.8</td>
<td>14.2</td>
</tr>
<tr>
<td>South</td>
<td>16.9</td>
<td>29.6</td>
<td>18.4</td>
</tr>
<tr>
<td>Micheweni</td>
<td>27.5</td>
<td>63.0</td>
<td>26.9</td>
</tr>
<tr>
<td>Wete</td>
<td>12.2</td>
<td>47.5</td>
<td>22.7</td>
</tr>
<tr>
<td>Chake Chake</td>
<td>35.7</td>
<td>40.9</td>
<td>25.7</td>
</tr>
<tr>
<td>Mkoani</td>
<td>28.0</td>
<td>47.8</td>
<td>21.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>21.0</td>
<td>37.4</td>
<td>20.3</td>
</tr>
</tbody>
</table>

Source: Teacher Management Study.

One aspect of this problem is that female teachers are less likely to take up posts in more remote areas and, if they do and get married, then they move to towns to be with their husbands. This appears to be the case in Zanzibar; the share of female teachers in Pemba’s districts is lower than
in most Unguja districts, and for both primary and secondary teachers (Study of Teacher Management, Tables 13a and 13b).

6.7 Methods of assessing teacher need, recruitment and deployment

6.7.1 Needs assessment and recruitment

Every year, the need for teachers by school and subject is identified across Zanzibar and a list provided through the Director of Pre-Primary and Primary and the Director of Secondary Education to the Director of the Department of Administration and Personnel, who, following a discussion, conveys this assessment to the office of the Principal Secretary, the MoEVT, and then to the President’s Office. Discussions are held between the two offices in February and then the President’s Office agrees on a number of teachers with the MoF and conveys this to the Ministry, usually in July or August. The responsible person at district level is the DEO but the basis for the determination of teacher need is not clear. At pre-primary level the need is estimated at two per class. At primary and secondary, it is three for every two classes. However, it is not clear how the needs at primary are assessed given that teachers of Standards 1–3 are expected to teach whole classes and teachers at Standards 5 and 6 teach subjects, four through English. And it is not clear how needs at secondary level are determined given the subject teaching requirements in each school. Further, it is not clear how this is conveyed in the actual teacher recruitment process.

When a final number of teachers is agreed, the Civil Service Commission is then tasked with recruiting teachers in September. Advertisements are placed and prospective teachers interviewed. The number of new teachers agreed was 794 in 2014/15 and 942 in 2015/16. We did not learn how many teachers were actually recruited. It is also unclear how the MoEVT is involved directly in the recruitment process though we have been told that the MoEVT does check applicants’ certificates.

According to the Report on views of education stakeholders of the causes of poor performance in the CSEE (MoEVT 2013b):

Teacher recruitment is not responsive to demand from schools. The increase in the number of classes at secondary level, due to efforts to increase access, is not being matched by increased recruitment of qualified teachers. Parents claim that teacher recruitment is not based on academic and professional qualifications leading to a mismatch between the subject specialization of teachers and the needs of schools. Without systematic, demand-based teacher recruitment systems the mismatch between the demand and supply of teachers will remain.

6.7.2 Current deployment practice

Subsequently, recruited teachers are assigned to schools, usually, though not always, in consultation with the DEO’s office. As has been seen, some districts manage better than others in meeting norms for the pupil to teacher ratio. While the pupil to teacher ratio at primary level is 63:1 in Micheweni District, it is only 24:1 in North B district. At secondary level, Micheweni also has the highest pupil to teacher ratio, at 28:1, and Central the lowest, at 14:1.

Part of Annex G summarises a ZISP preparatory study and describes the methods of teacher need assessment, recruitment and deployment in greater detail.
6.7.3 Observations

First, it would be valuable to have a discussion of needs parameters and, when agreement is reached, have this conveyed clearly to schools and DEOs. For example, what are the appropriate norms for class sizes for pre-school classes? Is the current three teachers for two classes at primary correct, or should teachers be assigned on the basis of classes at Standards 1–4 and on a three-to-two-class basis for Standards 5 and 6? If class sizes exceed a certain number, should teachers be assigned on the basis of two teachers per class, and what does this involve for teacher preparation? At secondary level the class size is a factor in determining teacher load but, again, ways of supporting single teachers where class size is large should be discussed. The key to secondary teacher recruitment, however, is determining needs by subject.

Second, when parameters of teacher need are agreed and communicated, the responsibility for determining teacher needs should be discussed. Should that be the responsibility of the DEO? If so, what is the role of the Directors of Pre-Primary and Primary, and Secondary? How do schools identify their needs – through a form to the DEO?

The recruitment processes could be improved. On the face of it, recruiting teachers is best left to the MoEVT, but if the Civil Service Commission continues to take the lead then the MoEVT should be more directly involved.

Third, deployment should be based entirely on the original needs assessment and recruited teachers matched to the school-specific posts for which they were recruited. Teachers apply for positions where the MoEVT and children in Zanzibar need teachers.

6.8 Utilisation of teachers

6.8.1 Current school teaching assignment norms: primary

In many countries, the norm is for primary teachers to teach whole classes and they are trained to do this. In Zanzibar, it appears that the government norm is that all teachers of Standards 1–3 should teach the whole class. In reality, we have not found any school where this happens: in each school visited, teachers teach subjects. In addition, many informants have confirmed that teachers teach subjects at all levels. This is a very inefficient way to allocate teachers. Where teachers teach whole classes, the utilisation of the teacher’s time is maximised: they teach when the school is in session, expected to be 40 periods a week or, usually, five hours 20 minutes a day. Where teachers teach subjects, the assignment is inefficient, and, as has been seen, teachers teach between 18 and 30 periods a week – or about two and a half to three hours a day.

One of the complicating factors is class size. Class size is a critical variable in determining teacher use where teachers teach subjects. Double-shifting can ensure that classrooms are used more efficiently and teachers assigned to reasonable numbers of children and for more reasonable lengths of time. In principle also, teachers can teach across the two shifts and maximise their efficiency. We did not find examples where this happens.

At secondary level, it is the norm for teachers to specialise and teach one or two subjects. In this case also, however, class size (as determined by enrolment and classroom availability) is a key determinant of teacher utilisation: the bigger the difference between the student to useable classroom ratio and the student to teacher ratio, the more inefficient the use of teachers’ time.

At upper primary and secondary levels, one identified problem is the mismatch between subjects taught and subjects studied. The report of the views of stakeholders (MoEVT 2013b) finds:
Of the teachers who were interviewed 32% taught at least one subject they were not qualified in. The subjects most frequently taught without qualifications were Civics (23 teachers taught this without a qualification), Mathematics (9 teachers taught this with no qualification) and Biology (8 teachers taught this without a qualification). Worryingly, Arabic was the only core subject where there were no un-qualified teachers teaching. Since Arabic was not the subject with the most qualified teachers, this indicates that there is inefficient deployment of teachers within the system. In some cases within schools there was an unqualified teacher teaching a subject when a qualified teacher for that subject existed within the school and was teaching other subjects they weren't qualified in instead.

On our limited school visits we found that average teaching loads were very low for one primary and one secondary school at 17 periods out a maximum of 40 periods per week, and impossibly high for another primary school where there were fewer teachers than classes. One cause of this is the very large class sizes, caused in turn by classroom shortages. If there are only 22 classes in useable classrooms in the primary school, then only 22 teachers can be in those classes at any one time (assuming one teacher taking one class). There were a total of 53 teachers in the primary school that we visited on Unguja. On the other hand, where teacher numbers are small and there are more classrooms than teachers, as in the school on Pemba, then the teachers’ load exceeds the maximum 40 periods a week.

Table 19: Average periods by teachers in two primary and one secondary school

<table>
<thead>
<tr>
<th>School level</th>
<th>Number of classes</th>
<th>Weekly periods</th>
<th>Total periods</th>
<th>Number of teachers</th>
<th>Average teacher load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Unguja</td>
<td>22</td>
<td>40</td>
<td>880</td>
<td>53</td>
<td>17</td>
</tr>
<tr>
<td>Primary Pemba</td>
<td>25</td>
<td>40</td>
<td>1000</td>
<td>13</td>
<td>77</td>
</tr>
<tr>
<td>Secondary</td>
<td>39</td>
<td>40</td>
<td>1560</td>
<td>94</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: Authors from school visits.

The Report on Study of Teacher Management (MoEVT 2013a) found that

According to the Ministry’s Basic Standards, a primary school teacher is expected to teach between 24–32 periods per week and a secondary school teacher is expected to teach between 18–28 periods per week. Due to shortage of Science teachers, in many schools Science teachers have a higher teaching load than Art subject teachers which to a certain extent affect their teaching performances. Also due to uneven distribution of teachers between district and schools, there are schools with shortage of teachers and as a result teachers in those schools experiences a heavy teaching load of between 35–40 periods per week. Situation like this can possibly lower the morale of teachers and their performance.

6.9 Teacher conditions and behaviour

A study conducted in preparation for ZISP (Borderwieck et al., 2015) surveyed 10 primary and 11 secondary schools and found that on average only 30% of teachers were in class teaching when surveyors visited primary schools and that 41% of the teachers were absent from the school. When the ZISP survey team visited secondary schools, 21% were absent from the school and only 15% of teachers were in class teaching at the time of the visit. This is an important issue and is likely to have an immediate impact on pupil learning.
Some of the reasons for this absence may be that teachers are receiving in-service support at TCs. Some are studying on the Distance Education certificate study in TCs on Thursdays and Saturdays, and when the TCs organise a course for teachers, schools release two teachers during the week. However, it may well be also that absence from the classroom and the school is related to teachers' motivation. The report on views of education stakeholders on the poor CSEE performance (MoEVT 2013b) found that: ‘Head teachers, parents and students all cited teachers’ low motivation and commitment as a cause of poor student performance. This low level of morale manifests itself in high teacher absenteeism and failure to adhere to codes of conduct’.

The most recent SACMEQ IV study also found that the number of cases of teacher misconduct was 'much increased' since the SACMEQ III study in 2007. It found further that the frequency of cases where head teachers had to deal with alcohol and drug abuse increased from 20% or below to more than 30%. It also found that cases of sexual harassment both of pupils and other staff members had more than doubled. This has been reported on earlier and is a real concern.

Head teachers and teachers stated that teachers' salaries are too low and teachers said they had low status within the community. Teachers' salaries are related to qualifications so degree holders get paid more than diploma holders, and diploma holders more than certificate holders. In regard to teacher salary norms, the GPE suggests an average teacher salary norm of 3.5 times GDP per capita. Currently, the average teacher's salary in Zanzibar is 2.2 times GDP per capita (see Chapter 4).

It would be helpful to identify the salaries of others at the same level as teachers for comparison – mid-level civil servants and nurse practitioners might be suitable. Whatever the reality, the study of teacher management (MoEVT 2013a) identified teacher motivation as a serious concern:

[C]urrently, teachers work in unfavourable conditions and the profession is losing its significance. Competent teachers leave the profession to look for other more profitable jobs and competent students do not join the teaching profession. Those who join the teaching profession are not by choice but as their last resort. This scenario cause for immediate action to improve teacher working conditions in order to attract competent students to join the profession and to retain the competent ones.

The motivation and morale of teachers warrants further investigation.

6.10 Current in-service provision and assessment of adequacy

As has been described, all of the regular pre-service courses offer opportunities for serving teachers to participate. Unqualified teachers can take the whole-time certificate course. Certificated teachers can take the diploma course, and teachers with good diplomas can take the degree courses. And many do at each level. It would be interesting to do a study of the number of serving teachers currently participating in whole-time courses of study across Zanzibar and equally interesting to trace their career paths after attaining the additional qualification.

However, for the purposes of the situation analysis, this study will confine itself to examining those more traditional in-service, part-time courses where serving teachers are helped to learn either about the subjects they teach or about how to teach their subjects, and in some cases have their qualifications upgraded as a result of this in-service.

The study of the causes of poor performance (MoEVT 2013b) found that only 5% of the teachers they interviewed received in-service frequently. Table 20 makes this clear. It seems reasonable to infer that the study is referring to ongoing in-service training, not in-service for upgrading.
Table 20: Teachers' reported frequency of receiving in-service training

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequently</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Once a year</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Seldom</td>
<td>77</td>
<td>14</td>
<td>91</td>
</tr>
<tr>
<td>Never</td>
<td>66</td>
<td>20</td>
<td>86</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>158</td>
<td>38</td>
<td>196</td>
</tr>
</tbody>
</table>

Source: Report on study of stakeholder perceptions (MoEVT 2013b).

However, the most recent SACMEQ study carried out in 2012 finds that teachers of reading and mathematics spend an average of six and 15 days respectively on in-service and that this is a major improvement over 2007, when an average of four days was spent on in-service training by teachers of reading and mathematics.

An example of an upgrading course is the distance education programme described earlier. This offers an opportunity for unqualified serving teachers to gain a teaching qualification while continuing to work as teachers. The success of this programme and the components of that success are well worth studying as a number of countries in Africa are struggling with modes of upgrading teachers while keeping them teaching. It appears that the Teacher Education Department is considering upgrading the course and offering it as a three-year diploma from 2016.

A second example is the kind of in-service being offered through TCs. There are 11 TCs across the two islands and these are overseen by the National Teachers' Resource Centre (NTRC), further described in Chapter 7. The TC's role is to provide pedagogical support to teachers in its zone. They were established to support primary teachers but they work now with secondary teachers also. Each TC has a number of Subject Advisers. (The two we visited had six each: languages, mathematics and science, religious knowledge, ICT, social studies, and inclusive education.) The SAs visit schools regularly; they try to visit each school in their zone at least once every month. In the school they talk to staff, identify problems and identify solutions. If they are able to solve the problems, they do so; if not, they report to the MoEVT. Some problems are solved at school level through demonstration classes or classroom observations followed by suggestions. Where problems are common across schools, SAs plan a short course and invite teachers to attend, usually for two days a week. Where SAs do not have competence themselves, particularly at secondary level, they have identified resource teachers who support them in course provision.

A Coordinator brings SAs together weekly to discuss current courses and future plans. Plans are developed on a three-month time horizon and reported on every three months. Plans are submitted to the NTRC, but this has only an advisory, not a financial role. Finance is provided through the MoEVT in payment of salaries and from fees, rental of rooms, where the TC has adequate facilities, and contributions. The fees are determined as TZS 1,000 for each teacher and TZS 100 for each pupil in the zone they serve. Civil society providers and occasionally MoEVT departments rent the premises to provide courses and pay for this. Many TCs provide facilities and support for participants in the distance education course. They attend the TC on Thursdays and Saturdays.

SACMEQ IV points out that two projects, ZABEIP (World Bank supported) and Tz21 (USAID supported) 'fully utilized TCs as places of in-service training of teachers'. It may be that the completion of these two projects has affected both utilisation and resources for TCs and this needs further study to ensure that the TCs are being utilised fully.
A third example of in-service is the course being offered by the E-learning Division and Teacher Education Department of the MoEVT. This is for primary teachers who have agreed to move to pre-primary schools; it takes 18 months to complete and leads to a formal certificate. The course began in 2015 with 350 teachers. It is described in Box 18 in Chapter 9.

6.10.1 Observations on in-service training

There is a growing consensus that the best kind of support to offer serving teachers who wish to teach better should respond to identified need and be provided immediately. The model of the TCs fits that approach. Teachers are consulted by the Subject Adviser and needs identified. Where help can be given immediately, it is. Where sufficient numbers have the same problem, a formal course is organised in the TC. At this juncture, it is not possible for us to determine how successful the TC model is in improving learning; we have observed many problems, including limited resources and staff. Nonetheless, this approach is well worth evaluating.

The success of the distance education course warrants investigation and possible replication also, perhaps involving the two universities in helping run a future diploma. The e-learning course underway is also promising and merits ongoing monitoring and support.

6.11 Concluding remarks on teacher management

Two interlinked technical studies and one MoEVT-led procedural study are suggested. An evaluation of the current provision of teacher education, including pre-service and in-service, covering quality at entry and graduation and impact of graduates at school level, could provide valuable information to schools and the MoEVT. This should be linked to studies of the time teachers actually spend in class teaching and the reasons for this as well as classroom observations of the way they teach.

Modalities for identifying teacher needs (including parameters of demand) and for teacher recruitment and deployment should be assessed and revised, and final agreements communicated to all levels of MoEVT, school, DEO and headquarter departments.

6.12 Classroom availability and needs

6.12.1 Current classroom availability

There is an acute shortage of classrooms at primary level, and insufficient provision at secondary. Classroom availability is closer to policy norms at pre-primary. The picture is not even across the country, with students in some districts facing much worse conditions than in others.

Looking at classroom availability in relation to student numbers in Table 21, there are 67 pupils on average for each classroom at primary, and 45 classrooms at secondary. Many schools (39% at primary and 20% at secondary) are using double-shifting of classrooms (using classrooms twice) to reduce class size.\(^{27}\) Taking this into consideration, effective class sizes are 48 on average at primary and 38 at secondary. This assumes that in schools with double-shifting, all classrooms are used twice for classes and that there are no teacher constraints. While the teacher section above found that there are sufficient numbers of teachers overall, their distribution is not well matched to need, and so this assumption is unlikely to be met completely. This means that the effective class sizes in Table 21 reflect a minimum.

\(^{27}\) This may be an underestimate because data on rates of double-shifting for North A district is not available for 2014 (see notes under table below).
Table 21:  Pupil to classroom ratios, double-shifting and class sizes by district, public and private schools, 2014

<table>
<thead>
<tr>
<th>District</th>
<th>Pre-school</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% schools</td>
<td>Pupil:</td>
<td>% schools</td>
</tr>
<tr>
<td></td>
<td>double-</td>
<td>Classroom</td>
<td>double-</td>
</tr>
<tr>
<td></td>
<td>shifting</td>
<td>Ratio</td>
<td>shifting</td>
</tr>
<tr>
<td>Urban</td>
<td>6</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>West</td>
<td>0</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>North A²</td>
<td>n/a</td>
<td>35</td>
<td>n/a</td>
</tr>
<tr>
<td>North B</td>
<td>4</td>
<td>27</td>
<td>26</td>
</tr>
<tr>
<td>Central</td>
<td>0</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>South</td>
<td>0</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Micheweni</td>
<td>0</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Wete</td>
<td>0</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Chake Chake</td>
<td>4</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>Mkoani</td>
<td>0</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>TOTAL³</td>
<td>2</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: EMIS/Statistical Abstract 2014. Note: (1) Effective class size is the pupil to classroom ratio taking into account double-shifting. It assumes that all classrooms are used twice to accommodate classes (each classroom is being used for a double-shift), and that there are sufficient teachers. (2) Rates of double-shifting are not available (n/a) for North A for 2014, but in the Statistical Abstract 2013 public schools in North A had rates of double-shifting of 31% in primary and 21% in secondary. (3) Total figures for rates of double-shifting are probably underestimated because of the omission of data from North A, while effective class size is probably overestimated slightly. (4) The shaded cells show the three districts with the highest rates of double-shifting, highest pupil to classroom ratios and highest effective class sizes.

There is wide variation and range in pupil classroom ratios, rates of double-shifting and effective class sizes across districts. The shaded cells in Table 21 highlight the three districts with the highest ratios and rates of double-shifting. There is a clear pattern. Primary classroom shortages are concentrated in Pemba's districts, and despite employing high rates of double-shifting, which narrows the disparity for students in class size, Micheweni and Mkoani have the two largest class sizes, followed by West (with Wete close behind). At secondary level, shortages are concentrated particularly in Urban, but also in West, Micheweni and Mkoani.

6.12.2 Projected classroom needs

As briefly explained in the teacher part of this chapter (see Section 6.4), both the teacher and classroom projections are underpinned by enrolment projections. The model projects enrolment from 2015 to 2020 based on assumptions about growth in the school-age population combined with assumptions about access rates to each level of education and internal efficiency parameters (see Annex G for details). The classroom projections are presented together with the teacher projections in the tables earlier in this chapter (Table 14, Table 15 and Table 16). There are some key points to note about the classroom projections before discussing the findings:

- Projections assume that the number of classes is equivalent to the number of classrooms, taking account of the number used twice in double-shifting. This is probably an over-estimation, and thus the projections likely underestimate needs. If data were readily available on the actual number of classes, the projections could be improved. These data are not currently published as part of the MoEVT’s statistical abstract and would be a useful addition.
- The projections of classroom needs are particularly uneven because of the steep increase in enrolment projected for 2016 due to the double-entry cohort. The number of classrooms needed per year has been averaged over five years. The rate of double-shifting at secondary level is about 20% and this has been maintained, so that when the double-cohort exits the
system, excess classrooms have not been projected.

There is a base projection for each subsector which assumes that all intake rates, flow rates, pupil to classroom ratios and rates of double-shifting of classrooms remain the same as the base year (2014). The requirement for additional classrooms is driven by growth in the school-age population and the dynamics of the flow of students already in the system. Under the base scenario, an average of 30 pre-primary classrooms, 60 primary classrooms, and 150 secondary classrooms will be needed per year between 2015 and 2020.

There are many parameters which could be changed to develop different scenarios. The improvement scenario presented in this chapter makes the following changes compared with the base scenario:

- **Pre-primary**: increase GER (based on four to six year olds) from 32% in 2014 to 50% by 2020 to improve coverage. This change will increase classroom needs to 140 per year.
- **Primary**: reduce class size from 47 to 40 students by 2020. This change will increase classroom needs to 160 per year.
- **Secondary**: increase promotion rate between Form 2 and Form 3 from 57% to 80% by 2020; increase the transition rate between Form 4 and Form 5 from 6% to 20% by 2020; increase class sizes from 37 to 40 by 2020. These changes will increase classroom needs to 171 per year.

Current rates of classroom construction are difficult to estimate comprehensively, covering all public and private sources. The budget speeches for various years report that 21 pre-primary, 500 primary and 330 secondary classrooms have been constructed in public schools since 2009. This is equivalent to an average of three pre-primary, 71 primary and 47 secondary public classrooms per year. In the most recent year, the budget tables 2015/16 (Table 11a) give a figure of 96 completed classrooms with funding from RGoZ, SIDA, or the community. If construction continues at these rates, it would appear to fall well short of sector needs under the base scenario for pre-primary and secondary, and under the improvement scenario for all levels.

This comparison is very crude, and it would be useful to undertake a more detailed and comprehensive analysis of past rates of construction. This would enable a more accurate comparison with projected needs to give an indicator of feasibility under current conditions and modalities.

### 6.13 Concluding remarks on classroom availability and needs

- Currently there are 38 students on average in a pre-primary classroom (public and private) with an average of 1.6 teachers, so the situation does not meet the policy norm of 40 children per classroom with two teachers, but the constraint here is teacher numbers.
- There is a wide geographical disparity in the availability of pre-primary classrooms in public and private pre-schools combined: the pupil to classroom ratio ranges from 24:1 in Micheweni to 40:1 in Mkoani.
- Given plans to expand the pre-primary system substantially, many more additional classrooms will be needed. If current class sizes remain the same and enrolment expands to cover 50% of four to six year olds, about 140 classrooms will be needed per year between now and 2020.
- There is an acute shortage of primary classrooms. Currently there are 47 students per class on average, and 39% of classrooms are being used for double-shifting.
• If the current rates of access, internal efficiency and class sizes remain then population growth alone will mean that about 60 additional classrooms are needed per year up to 2020. This will rise to about 160 per year, if class sizes are reduced to the policy norm of 40. 28
• There is a wide geographical disparity in the availability of classrooms in primary schools (public and private combined): the pupil to classroom ratio ranges from 41:1 in South to 92:1 in Micheweni.
• The current stock of classrooms allows for an average class size of 38:1 in secondary schools with 20% of classrooms being used for double-shifting.
• The double-cohort due to enter Form 1 in 2016 will put enormous pressure on the physical infrastructure. If the current rates of transition between primary and secondary and progression within secondary, and class sizes, remain constant then about 150 additional classrooms will be needed per year up to 2020 (leaving rates of double-shifting at 20%). 29
• There is a wide geographical disparity in the availability of classrooms in secondary schools (public and private combined): the pupil to classroom ratio ranges from 34:1 in South to 64:1 in Urban.

6.14 Availability of other resources in public schools

Apart from teachers and classrooms, there are many other resources needed in schools to ensure the students have a good learning environment. Table 22 summarises the current availability of some key physical resources in public pre-primary, primary and secondary schools.

<table>
<thead>
<tr>
<th>Resource type</th>
<th>Pre-primary</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupil–latrine ratio (male)</td>
<td>39</td>
<td>168</td>
<td>65</td>
</tr>
<tr>
<td>Pupil–latrine ratio (female)</td>
<td>40</td>
<td>161</td>
<td>72</td>
</tr>
<tr>
<td>Percentage of public schools with:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water (%)</td>
<td>81</td>
<td>85</td>
<td>88</td>
</tr>
<tr>
<td>Electricity (%)</td>
<td>71</td>
<td>88</td>
<td>94</td>
</tr>
<tr>
<td>Library (%)</td>
<td>8</td>
<td>31</td>
<td>45</td>
</tr>
<tr>
<td>Functioning computers (%)</td>
<td>n/a</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Pupil–desk space ratio</td>
<td>2.0</td>
<td>3.0</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: Statistical Abstract 2014. Note: (1) It is not specified if this means safe drinking water or not. (2) n/a means ‘not available’.

Insufficient sanitation facilities are clearly a major problem, in primary schools particularly. More than 160 primary students share a latrine and the ratios are similar for boys and girls. Such high ratios are liable to be unhygienic for students and may also affect demand for education, especially among older girls.

The vast majority of public schools have access to water, but 19% of pre-primary schools, 15% of primary schools and 12% of secondary schools do not. Having access to water, however, is typically not the same as having access to safe water for drinking. The MoEVT’s water, sanitation and hygiene mapping exercise in 2012 found that nearly 30% of public primary and basic schools

28 Both scenarios assume that that rate of double-shifting remains at 39%.
29 This will help to ensure that when the double cohort exits the secondary system, the problem of excess physical capacity is not created.
did not have safe water (see EFA report, MoEVT 2014a, p. 164). Clearly this is not a healthy situation, and investment in both sanitation and water facilities to ensure full coverage is an important priority.

Most public schools have access to electricity; the lowest share is for pre-primary schools, where 29% lack this service.

Less than half of public primary and secondary schools have a room designated as a library, but even without the physical space, schools may still be offering library services to their students.

Very few primary or secondary schools have functioning computers, and so opportunities for using computer technology for teaching and learning are currently very limited.

There is a shortage of desk spaces in public primary schools, where three students share one desk space on average. Pre-primary schools also appear to have desk shortages, but teaching at this level typically does not require such a formal seating arrangement for children. There is close to one desk space for every public secondary student.

At primary and secondary level, textbooks are key resources for student learning. It is not possible from the data available (see Statistical Abstract 2014) to judge the quality or usage of textbooks by students, but average pupil to textbook ratios give some indication of resource availability.

For primary students averaged across all standards, in 2014 there were 2.9 textbooks for every student in English, Kiswahili, mathematics, science and social science. While this is not ideal, it suggests that most students perhaps have the opportunity to at least work in a relatively small group with a textbook to share (although of course this depends on textbooks having been distributed equitably). Many more students had to share textbooks in Arabic and Islamic studies (40 and 30 students sharing respectively).

For secondary students averaged across Forms 1 to 4, there were textbooks for close to every student in biology, chemistry, English, geography, history, Kiswahili, mathematics, physics and civics. This is an impressive achievement. Pupil to textbook ratios are much higher in some other subjects, such as Arabic and Islamic knowledge, among others.

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Piped water is considered a safe source, while other sources (protected or not) are not considered safe.
7 System capacity

Box 12: Key findings on system capacity

- The MoEVT central departments and units cover all key education subsectors and issues, and the autonomous agencies replicate those in well-functioning systems.
- The EMIS is established and functioning. Concerns include fragmentation of data sources, fragility of storage arrangements, and limited dissemination.
- Many of the autonomous agencies established have clearly defined functions and sufficient staff but very limited other resources to perform their functions.
- The process of discussing and planning desirable policy measures, such as establishing autonomous agencies or extending the years of compulsory schooling may not have included a medium-term analysis of the finance needed and of affordability.
- The decentralisation modalities involving Regional and District Education Offices are not well understood even by REOs and DEOs, and while these function well in large countries it could be questioned whether Zanzibar benefits from this type of decentralisation and whether it supports pupil learning.
- The Enacted Law of Local Authority could have a profound effect on responsibility for education delivery. This will need analysis and discussion, and the impact on each agency will need to be determined.
- School level supports for teachers are functioning and could function well. Greater community involvement could get more children enrolled at the appropriate age. Head teachers would benefit from more direct support.
- Zanzibar’s intention to lessen the burden on parents by removing ‘voluntary contributions’ is laudable. However, replacing this finance with targeted purchases lessens school autonomy and may have a deleterious effect on learning.

7.1 Introduction

The first part of this section examines the system structures currently in place in Zanzibar to oversee policy and planning in the delivery of education. This focuses on an examination of the MoEVT departments and units themselves, the semi-autonomous and autonomous agencies supported by MoEVT, and then looks at the regions and districts. Accordingly, the focus is top-down. The second part starts from the school level, from community, pupil, student, teacher and head teacher level and then works out from there. What do pupils need to learn better and how are schools able to access resources and advice in order to help children learn? And how do the district, region, island and central MoEVT organs support the schools?

7.2 MoEVT

The MoEVT has eight departments: Pre-Primary and Primary; Secondary; Teacher Education; Non-Formal, Adult and Alternative Learning; Policy Planning and Research; Information and Communications Technology; Sports at Schools; and Administration and Personnel. It also has seven units: Inclusive and Life Skills Education; Education Registration; Information and Communication in Education; Accountant; Procurement; Internal Audit; and Higher Education Coordination. Each of these departments and units also has a coordinator based in Pemba, managed by the Officer in Charge for Pemba.

In addition to the departments and units directly under the MoEVT, there are a number of semi-autonomous bodies: the ZEC; the Office of the Chief Inspector of Schools; the ZIE; SUZA; the KIST; Zanzibar Library Services; the VTA and the ZHELB. These are overseen by their respective councils and boards. The figure on the next page shows these departments, units and agencies.
The Situation Analysis team had discussions with all department directors and most of those in charge of units, as well as a selection of staff at the Pemba office. In addition, we met with SUZA, ZHELB and the VTA. Others met helped to describe these institutions here.
Figure 40: Structure of the MoEVT
7.2.1 EMIS

The EMIS is appropriately located within the Policy Planning and Research Department and is one of its five divisions. Currently, it has eight staff in the MoEVT headquarters and one staff member in each of Unguja's and Pemba's 11 districts. These staff members were originally teachers and received training in statistics supported by SIDA. One of its main functions is to carry out and report on the annual school census. The first Zanzibar Statistical Abstract 2010–2013 was published in April 2014 and was widely circulated. A second Statistical Abstract for the 2014 census is being finalised.

Identified problems include:

- **A fragmented system**: school census information is held by the EMIS section; teacher information by the HR department; examination information by the ZEC and NECTA; finance data by the Finance department and school-level data by the Chief Inspector. Ideally, these data should be held as part of one EMIS system.

- **Fragile storage**: there are separate Excel spreadsheets storing data from different parts of the school census questionnaire, and for different years, so it is difficult to conduct cleaning checks within and between years. The large number of Excel spreadsheets are stored on limited numbers of computers, and there is no other back-up.

- **Data reliability concerns**: there is incomplete coverage of the private sector; errors are possible because of the paper and manual entry system.

- **Limited dissemination**: the statistical abstract is excellent but needs to be published at the same time each year; district level data are available but school-level data are not; exams information should be disseminated and utilised for learning improvement at school level.

Urgent attention should be given to publishing the 2014 Abstract. In addition, it would be valuable to put all of the existing school census data into a simple database that can be queried. The following should also be considered: producing systematic and comparative data for schools; reviewing the purpose of monthly school returns; and investigating integrating school census, financial, examination and teacher data to ensure maximum utilisation.

7.3 ZIE

The ZIE was formerly the Department for Curriculum and Examinations with responsibility for dealing with curriculum and curriculum support materials. In February 2011, RGoZ established ZIE and determined its roles to include curriculum and textbooks, and training teachers on curriculum implementation. There was also a Department of Examinations, which was responsible for internal exams at Standard 7 and Form 2. In February 2011, RGoZ also established the ZEC. ZIE is housed in two rooms and has 13 staff members in its Curriculum, Research and Administration divisions.

The new two-plus-six-year curriculum has replaced the seven-year primary curriculum, and since 2009 the ZIE (then the Department of Curriculum and Examinations) has had a mandate to look after pre-primary as well as primary and secondary. ZIE is responsible for setting the number of subjects and for the curriculum content at all levels – particularly for the new primary curriculum. This has been implemented for lower-primary, Standards 1–4, since 2010, and subjects taught include: Kiswahili, mathematics, science, social studies, Arabic, English language, Islamic studies and Sport. At Upper Primary level, Standards 5 and 6, the new curriculum has been in place since 2014 and includes 12 subjects: science, mathematics, geography, ICT, English and Arabic, Islamic
studies, vocational training, Kiswahili, history, civics and sports. The first five of these are being taught through English as part of the new curriculum.

Currently, ZIE is closely monitoring the transition from seven years of primary to eight years, including two pre-primary and six primary. During 2015, the two cohorts, those studying for seven years and those studying for two plus six years are completing primary education at the same time. ZIE is hoping that the two cohorts can be separated in the secondary schools and their progress measured and compared. This is a unique opportunity for learning in the sector, and it will be important to ensure that the evaluation is designed properly from the start. Schools will need to be given clear instructions on how to organise students, and what records need to be kept on each student, if a rigorous comparison of performance is to be possible in future.

ZIE is also concerned that the current supply of primary textbooks, which was in the ratio of pupil to textbook at 1:1 in the recent past, is now much worse and in key subjects as high as 10:1. Problems identified by ZIE in fulfilling their mandate include: resource constraints, staff and space and budget for travel and research.

7.4 ZEC

ZEC was established in February 2012, as stated in the 2006 Education Policy. Previously, examinations were under the Director of Higher Education and later the Director of Curriculum and Examinations. The change recognises the importance of examinations and assessment.

ZEC’s main responsibilities include:

- Internal examinations in Zanzibar (Standard 7, now Standard 6), setting, marking and distributing results. In regard to dissemination there are some rankings of students and schools and districts. A team from the MoEVT follows up at school level with poor performers and the media are also invited to discuss results.
- ZEC is also responsible for some part of the teacher education examination. The main part was the NECTA’s responsibility. However, see Chapter 10 for changes to this.

NECTA is responsible for the Form 4 and Form 6 examinations and ZEC sits on NECTA’s Board. The Form 4 and Form 6 results are published on NECTA’s website.

ZEC works closely with ZIE to ensure exams meet curriculum standards and with the Office of the Chief Inspector of schools.

7.5 Chief Inspector of Schools

The Office of the Chief Inspector of Schools was established in February 2011. The current Chief Inspector of Schools has only been in post since October 2015 and one of his main tasks is to restructure the Inspectorate, currently comprising 42 staff (of whom 18 are in Pemba). None of these staff have received training as an Inspector of Schools. The restructuring will focus on: (i) capacity building; (ii) improving teaching; (iii) QA in the inspection process; and (iv) developing a framework for inspection. The basis for the restructuring is the report by MCM Ehren for UNICEF dated December 2012. This recommended a two-step approach with the first step involving: ensuring autonomy of the Inspectorate, increasing accountability; providing training; developing a structured observation and feedback form; targeting feedback to relevant stakeholders; and developing a framework of inspections standards. The second step involves: improvements towards a full-fledged inspection system for Zanzibar, which includes centrally organised bi-annual inspection visits to schools (with a reduced inspection team), in which school-level conditions are
evaluated as well as targeted additional assessments of individual teachers. These regular visits are used to inform more customised visits to failing schools in which specific areas in need of improvement are targeted (Ehren, 2012).

Currently, the Inspectorate carries out two types of inspections: visiting inspections and basic inspections. Visiting inspections take less than a day, usually a few hours, and involve seeing that the processes are being followed, and that attendance records of pupils and teachers are current; they also check physical facilities including textbooks and school tidiness. A basic inspection takes three to four days; a number of inspectors with the DEO are invited to the last day, and a report is made to the SMC and then shared with the DEO.

The main problems with inspections are: limited resources for staff to carry out inspections and very limited follow-up to inspection findings. The number of inspectors is low compared to the ever-growing number of schools, both public and private, and there is a shortage of the technical knowledge needed to translate key findings into strategic action, which would allow inspectors themselves to help schools.

### 7.6 The NTRC

The NTRC is directly under the Teacher Education Department. So it is not an autonomous body, but it does have a national role. Accordingly, its work is described here. NTRC supervises and monitors 11 TCs. Its role is advisory, not financial. The advisory services include coordinating and providing in-service training to subject advisers and TC Coordinators. In addition, NTRC supervises the implementation of the Strengthening of Mathematics and Science in Secondary Education programme, formerly financed by Japan. Currently, NTRC has 12 staff members: a Head of Division, a National TC Coordinator, a National Subject Adviser for Islamic and Arabic, a librarian, a secretary and an office attendant, and three staff for Distance Education. The NTRC is housed at Beit El-Raas, an old building near SUZA's Vuga campus. There is a computer lab but only four computers. The NTRC does not have a relationship with the DEOs, though DEOs are invited to national TC meetings. Instead, NTRC have TC coordinators in each of the 11 TCs.

Problems include a lack of resources: vehicles, computers and learning materials; a severe staff shortage, including National Subject Advisers for science subjects, social studies, English, mathematics, ICT and lab technicians; and a very limited budget.

### 7.7 VTA

The Zanzibar VTA is described in Chapter 12. Identified problems include a shortage of staff and discretionary finance for those serving staff to enable them to perform their work. In addition, there is a shortage of qualified staff in VTCs and the subsector is underfinanced.

### 7.8 Observations

On first examination, Zanzibar’s educational structures are both wide-ranging and comprehensive. At MoEVT level the key departments and units appear to cover all the important subsectors of education. In addition, the autonomous or semi-autonomous agencies dealing with key issues such as the ZIE, ZEC, VTA and Inspectorate, while at district and island level these are REOs, DEOs, TCs, and of course schools with SMCs.

However, closer examination reveals that while many of these semi-autonomous bodies have clear roles and responsibilities and sufficient staff in place to carry out some of these responsibilities,
they are starved of resources. Each institution interviewed identified this as a problem. This situation is likely to continue as the resources available are demanded by higher staff numbers and perhaps higher staff payments. It does not appear that the decision to establish some of these agencies or establish a particular policy was followed by a careful medium-term and costed implementation plan that would help determine whether the policy could be implemented with the resources available.

It may be too late to examine the functions which each body carries out and determine: (i) whether these functions could be carried out in more cost-effective way; while (ii) retaining Zanzibar’s own unique education system and objectives.

7.9 Decentralisation: islands, regions and districts

The first part of this section identified the organs located in Unguja overseeing the education sector’s work. However, the structures also include an extension of the MoEVT head office in Pemba, five Regional Education Offices and 11 District Education Offices. We met with staff at the Pemba office, four DEOs and one REO. In addition, there are currently 11 TCs, each focused on providing in-service support to teachers, and we met with three of these.

7.9.1 MoEVT Pemba

Each department and unit has a coordinator to act as a liaison between the directors in head office (Unguja) and education institutions in Pemba. The Pemba staff are managed by the Officer in Charge, who works on behalf of the Principal Secretary. The Pemba office ensures all policies are implemented in Pemba, and the Officer in Charge facilitates activities between head office and the Pemba coordinators. The Pemba coordinators take part in some activities in Unguja to present the Pemba situation, and supervise some local activities, such as construction.

Pemba may be under-resourced compared to Unguja. Chapter 4 shows that Pemba receives a much lower share of its non-salary recurrent budget than the Unguja departments do, leaving coordinators with no funds for activities other than the basic running of the office. The Officer in Charge is expected to act on behalf of the Principal Secretary, but he does not have decision-making authority (for example, we were told he cannot sanction leave without pay).

The Pemba Office holds a weekly meeting for all Department Coordinators and DEOs. This meeting is used to cascade information from head office and discuss issues coming from schools and communities. Coordinators and DEOs write quarterly reports, as do the head teachers and TCs. Inspectors send their reports to Pemba and head office. Where the Officer in Charge identifies issues in a report, he forwards it to the relevant director with his own comments.

7.9.2 Regional Education Office

We were not able to find written details of the role, functions and responsibilities of the REOs. Our current understanding of the roles (based on one interview) is the following: ensuring that schools have the teachers they need; supervising schools; acting as secretary to the Regional Education Board; and organising regional exams. REOs’ salaries are paid by the Regional Commissioner but their staff members are paid by the MoEVT. It appears that the REO does not select staff; they are provided to the office by the MoEVT. The additional resources being provided include TZS 1,000 a day for transport though all REOs and DEOs were provided with motorbikes by SIDA. It appears that a major source of income is the management of examinations; NECTA pays REOs (and DEOs and teachers) to be supervisors and invigilators in November of each year and they earn in excess of TZS 550,000 for this. In addition to NECTA Form IV and VI exams, the REO also organises
regional mock exams, for which students pay a fee. REOs have the authority to transfer students and teachers between districts (and DEOs within districts) but the MoEVT also allocates teachers.

We learn that the Enacted Law of Local Authority has just come into place and that this transfers authority for the implementation of education in each Region to the REO and away from the MoEVT. We were also told that the REO would report to the Regional Executive Director, who would have hiring and firing authority over teachers (among other powers). Other MoEVT officials informed us that the intended transfer of authority to local levels is likely to be more marginal. This is a potentially major development and the implications should be clarified, discussed and the impact on learning assessed.

The major problems facing the one REO that we interviewed includes control over hiring his own staff, shortage of resources, and interference in deployment of teachers from MoEVT headquarters.

7.9.3 District education offices

We interviewed four DEOs and understand that the district education office is intended to be the main point of contact with schools and that it provides reports to the MoEVT on the District. It appears that DEOs are intended to work with district education boards, which should include young people, primary and secondary teachers, retired education officers, and influential people with an interest in education, but these meet very infrequently. The four DEOs we met reported that they all visit schools regularly – every quarter was commonly reported – and are also the conduit for monthly pupil and teacher attendance data, which is compiled manually and submitted to higher levels. This data does not appear to be summarised at any level and is only used for administrative purposes, not for analysis. They have no inspectorate role but are invited to the last day of basic school inspections and receive the reports, and may follow up to see if implementation is carried out. Some see a role in helping schools develop school plans but they are not able to perform this role on a systematic basis. In regard to teachers, DEOs see their roles as assessing teacher demand and deploying new teachers, as well as transferring teachers where they are needed. However, this role is sometimes taken over by the MoEVT headquarters. They have a specific role in examinations, delivering and retrieving examination papers securely on behalf of NECTA with assistance from the police and other security departments. One DEO told us he had received a job description when he started the job but others had not.

Each DEO has a number of staff reporting to him/her but none have sufficient office space. DEOs are paid by District Commissioners (DCs) or by the MoEVT; it was not clear why the situation is not the same for all DEOs. Some DEOs receive an allowance (TZS 40,000 a month) for fuel from the MoEVT; however, this was not sufficient, and may not apply to all DEOs. Being based in DCs' offices, DEOs are sometimes asked to report to the DC and may be given tasks by the DC, even if these are not relevant to education.

Generally, there appeared to be a large degree of variation in the operation of DEOs. While they are the vehicle for sending messages from the MoEVT headquarters to schools, there are examples of DEOs each sending out different communications and interpreting policy directives differently. For example, Bartlett (2014, p.23) sets out a number of different understandings by DEOs of the pre-schooling directive, none of which apparently were correct according to the MoEVT.
7.9.4 TCs

Separately under the NTRC are 11 TCs. Currently there are TCs across Zanzibar organised on a cluster basis, and their pedagogical support work was described in Chapter 6. They are providing much needed support to teachers as they struggle with pedagogy and content. Finance is provided through the MoEVT in payment of salaries and from fees, rental of rooms, where the TC has good facilities, and contributions. The fees are determined as TZS 1,000 for each teacher and TZS 100 for each pupil in the zone they serve. Civil society organisations and occasionally MoEVT departments rent the premises to provide courses and pay for this. Each TC Coordinator interviewed identified particular problems with the resources necessary to carry out their work yet many were able to construct additional rooms with community support and using their own resources.

7.9.5 Observations

Pemba staff members have limited autonomy. Clearer roles and responsibilities should be laid down for them and authority for more issues could be transferred to Pemba, provided the necessary resources are also transferred.

We were not able to see written sets of roles and responsibilities for REOs and DEOs and we were told that not all were provided with these when they were appointed. When asked how he decided what to do after his appointment one DEO said that he ‘talked to other DEOs and found out what they did and then did that’. DEOs do not have adequate resources, supplementary budget or space to carry out their work. The relationship with the District Government is not clear; one DEO told us he was paid by the DC and had some responsibilities on their behalf. There is poor communication between DEOs and the MoEVT on teacher needs and deployment: ‘we don't have a common language.’

The appraisal of ZEDP in 2013 found: 'Implementation of decentralization is still ineffective: REOs and DEOs roles are unclear, ineffective, and have no budget.' This study found no change in this. That study asked an even more fundamental question: ‘Opportunity of decentralization at these levels is questioned in a small country like Zanzibar; decentralization to school level would be preferable and more cost effective’ (Education Development Partners Group in Tanzania, 2013).

As described earlier, TCs have problems carrying out all of their functions and planned interventions as the resources provided by teachers and schools do not suffice. They are also short of some important staff and need improved facilities, learning materials and space. Partly because of this situation, in-service training is generally carried out on an ad hoc basis when a programme provides funding or the TC is able to plan for school-based support. It would be of greater benefit to teachers if there was more systematic provision.

7.10 School level

At the most basic level, children need teachers and learning materials and a well-organised and safe school environment. There are four key drivers of learning: the head teacher to ensure that children are safe and teachers do what is expected of them; the teacher to ensure that children focus on learning; adequate learning materials to provide additional stimulus to the children; and parental and community support to ensure children are 'school ready’ – and ideally to monitor school expenditure and teacher behaviour. We examine each of these, and finally discuss school control of finances.
7.10.1 Head teachers

Research points to a strong positive relationship between talented school leadership and student achievement, which is why many educational systems worldwide are paying attention to school leadership. Recent research has shown that there is no single case of a school improving its student achievement record in the absence of talented school leadership to help shape teaching and learning (Louis et al., 2010). School leadership plays a key role in improving school outcomes as it impacts teacher motivation, the conditions and climate within which teaching and learning take place, and connections with the broader community.

Most schools in Zanzibar have a head teacher, in each case appointed by the MoEVT. Unusually, standalone pre-primary schools also have head teachers, though they usually have only two classes, while attached pre-primary classes are under the primary school head teacher. The way in which the head teacher is appointed and the selection procedures are not clear. The head teachers interviewed told us that they were asked to become head teachers – in other words, they did not apply. We were informed by MoEVT officials that, while this is the case, head teachers ‘came up through the ranks’ being appointed as section leaders or deputy heads before being appointed as head teachers and they (Ministry officials) gained knowledge of their work through inspectors, subject advisers in TCs or from DEOs. The most recent SACMEQ IV study finds that 65% of head teachers are male; this compares to about 40% of primary teachers (EMIS 2014).

The limited number of head teachers we interviewed all like their job, believe they have a good relationship with teachers and many still teach, even in large schools. At primary school level, head teachers face particular problems with classroom shortages and arrange for some classes, usually particular Standards (1–4 or 5–7), to be held in the morning and the remaining Standards in the afternoon. However, no teacher teaches in both morning and afternoon while the head teacher is expected to be there for both sessions. Head teachers reported to us that they had not received any formal training in their roles and one qualitative study (MoEVT 2013b) corroborates this, as Figure 41 shows.

Figure 41: Time spent by head teachers on management courses


Another source, the draft SACMEQ IV study (Salim, 2015), indicates that 77% had taken a management course. We were not able to reconcile the two findings.

SUZA has begun to provide a Diploma in School Leadership and Management. The first 55 graduated in 2014, while there were 44 studying on the second year – presumably most of these
will graduate in 2015. There were 31 on the first year of the diploma course expected to graduate in 2016. SUZA informs us that most of the participants are serving head teachers. Clearly, this course will make a difference to professionalism among head teachers. Clearly also, head teacher absence from school while studying will be a problem.

Head teachers report having a good relationship with the DEOs and often ask them to talk to teachers when there are problems. Head teachers also report that there are SMCs and Parent–Teacher Associations meeting every three months and these can help with pupil and student discipline. The decision to remove voluntary contributions appears to be welcomed by the community though the head teachers we spoke with were concerned once they discovered that they will not be able to pay for utilities and some other direct costs.

7.10.2 Teachers

Head teachers told us that they supervise teachers and spend additional time working with newly appointed teachers. The World Bank survey conducted as preparation for the new project (ZISP) found that 50% of head teachers in primary schools thought that they met with their teachers at least once a month while 75% of the teachers from their schools thought they met with them at least once a month. The vast majority of teachers in the same survey agreed with the statement: 'I feel I am held accountable by the head teacher.'

Figure 42: Share of teacher responses who feel they are held accountable by the head teacher

![Graph showing teacher responses]

Source: ZISP survey of 21 schools (author computation from data supplied by the World Bank).

Currently, as described earlier, there are sufficient numbers of teachers in place in many of Zanzibar’s schools. As earlier described also, many of these teachers are not trained in areas they should be, such as mathematics and science, ECE methods, and English language. Given this, one important action would be to provide them with access to support in these areas. While the head teacher does provide some support it appears that this is limited to school orientation and classroom discipline. It also appears that inspectors visit very infrequently and their focus is not on teacher improvement (though it may become more focused on this if new plans materialise) and that DEOs do not visit teachers in their classrooms or assist with pedagogy or subject knowledge. This is left to the TCs. As described, the Subject Advisers in TCs visit schools regularly and talk to teachers to identify problems. When sufficient numbers of teachers identify the same problem then the Subject Adviser arranges a course during the week and schools release teachers to attend the
course. The TCs also provide support when directed by the NTRC or directly by the Teacher Education Department. This support is valued by teachers.

7.10.3 Learning materials

A third important support for children's learning is a supply of learning materials. Currently, textbook supplies may be reducing and while pupil to textbook ratios appear satisfactory in lower standards in primary schools (under two pupils per textbook for most subjects), the ratios are now over 9:1 in mathematics and science in upper standards, according to the 2014 Statistical Abstract. Ratios are closer to 1:1 for key subjects in secondary. We were not able to determine the way in which textbooks are being utilised by pupils and students in primary and secondary schools. Proper utilisation is critical to learning.

Textbooks have been provided with support from development partners in the past and the MoEV is now planning to supply textbooks and other instructional materials to schools to the value of TZS 19,000 per pupil in replacement for the 'voluntary contributions' now ended.

While there may be advantages associated with the central purchase of learning materials, including economies associated with bulk purchase, there are also problems – one is the inflexibility of identification and supply. Schools themselves know which books they need and how to purchase them. How should these be identified, purchased and delivered to schools? Can the school do the identification, purchasing and delivery? Schools can certainly do the latter two but perhaps under-qualified teachers might have difficulty with identifying what resources are needed.

7.10.4 Community support

All schools are expected to have SMCs and Parent–Teacher Associations and these meet two or three times a year. However, the study of poor performance in the CSEE (MoEVT 2013b) found as follows:

According to policy, school committees should be playing a prominent role in school management; however parents stated that most school committees are ineffective. Where school committees are performing well, they concentrate on construction rather than quality improvement. This may be due to the fact that it is easier to raise funds for a tangible project rather than to tackle the more elusive factors determining the quality of education provided.

There are a number of issues where communities can provide support. The main one and the least costly is appropriate age enrolment. Currently, only 11% of entrants to Standard 1 are six years old in 2014. While the numbers enrolled in pre-primary is around 50% of the age range (four to five year olds under the 2006 education policy), over 50% of the entrants to pre-primary were either four or five years old. If parents can be shown the benefits of enrolling children in pre-primary at four years old, this will drive up the number and share of appropriate age children entering primary school. Discussion between schools and its communities about the importance of appropriate age entry can help improve this.

A second area in which SMCs and Parent–Teacher Associations can help is teacher discipline and pupil attendance and discipline. Visiting parents whose children are frequently absent is a task better carried out by community members. Also, involving the community in monitoring teacher attendance can remove friction between the head teacher and teachers.
7.10.5 Finance for schools

RGoZ has determined that parents will no longer have to pay voluntary contributions to primary schools (and to pre-primary schools, though this is not yet widely communicated). In the longer term it is also intended to remove fees for secondary schools; in the interim, RGoZ is covering the costs of examinations. This decision should help more children from poor families to participate in primary and pre-primary schools. RGoZ has also decided to provide equivalent resources to schools to make up for the financial loss and this is necessary. However, the MoEVT has decided to provide these resources centrally and to purchase learning materials and other supplies and provide them to each school. It is unclear how some school costs – utilities are one example – can be met by schools now. This needs clarification. It would also be useful for the MoEVT to examine the potential benefits of providing at least some of these central resources directly to schools. There is a good deal of international evidence that school grants provided directly to schools to enable them to purchase materials and pay for other learning-related activities are helping schools plan better and improve morale.

7.11 Conclusions

Many of the units, departments and autonomous agencies established by RGoZ and the MoEVT have clear functions and staff but very limited resources to implement those functions. This creates stasis and can have little positive impact on pupil learning. At the central MoEVT level, most staff lack job descriptions, and there has been no revision of roles and responsibilities to meet the needs of the 2006 Education Policy.

A study of the current system that examines roles and functions and their impact on learning outcomes should be undertaken. This should be followed by a study of the costs and cost-effectiveness of each unit within a realistic resource envelope. In particular, the study should examine the costs and benefits of the current decentralisation arrangements.

A study of the effects of implementing the policy that removes voluntary contributions is needed. The study should identify how school running costs can be met. The study should further examine whether school grants enabling some school-based expenditures would be useful in Zanzibar.
8 Equity

Box 13: Key findings on equity

Learning achievement

- Girls outperform boys on the Form 2 examination, while boys outperform girls in passing the Form 4 examination and qualifying for Form 5. By contrast, there is little gender inequality in either the Standard 7 or Form 4 pass rates overall.
- Results from learning achievement surveys at primary level suggest that the direction of gender disparity is different in reading Kiswahili (girls perform better) and mathematics (boys perform better).
- Gender inequality in pass rates varies a lot across districts, especially as the level of the examination increases. Examination performance tends to be better for boys than girls in Pemba and North A on Unguja, while it is much better for girls than boys in the Central and South districts of Unguja.
- There are very large disparities in examination pass rates across districts; the gap is particularly large for the Form 4 examination. The relative performance of districts to one another is not consistent in the different examinations.

Inequality in enrolment capacity and exclusion

- For primary school-aged children, being a boy, living in a rural area, coming from the poor household or a household where the head is uneducated are all factors associated with being out of school. Boys who live in the poorest fifth of households have a 43% chance of not being in primary school.
- Children with disabilities have considerably higher rates of school exclusion than average.
- The district where a child lives makes a huge difference in the extent to which school places are currently available and taken up.
- The pre-primary system’s capacity to enrol children (measured by GERs) is lowest in Wete and Chake Chake in Pemba.
- The primary and ordinary secondary systems have lowest enrolment capacity (measured by GERs) in Micheweni in Pemba and North B in Unguja.
- At pre-primary and primary level, most districts are close to gender parity in enrolment, but at ordinary secondary level female students outnumber males in all districts.

Inequality in resourcing

- Pemba’s four districts are the most disadvantaged in public teacher numbers relative to pupils, at pre-primary, primary and secondary levels, compared with other districts.
- Micheweni and Mkoani in Pemba are also comparatively under-resourced in public classrooms relative to the student numbers, but the most populated districts in Zanzibar have the greatest shortages of pre-primary and primary public classrooms (West) and secondary classrooms (Urban).
- District disparities in public classroom provision have narrowed in the past five years because the Government has been targeting additional classrooms towards districts with the greatest needs.

8.1 Introduction

The aim of this chapter is to highlight gender, geographical, and where possible, household characteristics and special needs associated with inequality in education. Understanding the extent of disparities in learning achievement and access to schooling and resourcing can help in the design of policies that promote equity – moving closer to the ambition of ensuring that every child has an equal chance of succeeding in the education system.

Inclusive education is a policy priority. The 2006 Education Policy stipulates that ‘inclusive education shall be provided to ensure that children with special needs get equal opportunities, barriers to learning are addressed and the diverse range of learning needs are accommodated’ (MoEVT, 2014a, p. 37). In 2010, the Inclusive Education and Life Skills unit was established within
the MoEVT to oversee the implementation of the inclusive education policy. The core approach is integration such that students with special education needs, such as learners with disabilities, learn in regular classrooms, supported by appropriate materials and pedagogies. By 2013 more than half of primary school teachers had received some limited in-service training on supporting children with special needs, while about 4% of primary teachers had completed a one-year inclusive education certificate (MoEVT, 2014a, p. 49).

The analysis presented in this chapter is limited by the available data, mainly from EMIS and household surveys. There is no doubt that there are other groups of marginalised children who do not feature in this overview, or are covered in a very limited way, such as children with disabilities. Studying these smaller groups of disadvantaged children systematically is a challenge, but also a priority. Equity goals will not be reached unless the specific needs of different groups of marginalised children are understood and met.

This chapter is divided into five sections. The first three sections summarise and discuss statistics on disparities in learning achievement, enrolment capacity and exclusion, and resourcing of education respectively. The fourth summarises perceptions of the reasons for the observed inequality based on interviews conducted for this report. The forthcoming UNICEF OOSC study (mentioned in Chapter 2) is expected to contain a systematic analysis of barriers facing children who are excluded from school, and also those currently in school but at risk of exclusion. The final section offers conclusions.

This chapter uses two simple ways of comparing performance indicators between groups to assess the extent of inequality:

- **Absolute gaps**: calculated by subtracting the value of the performance indicator for one group from that of another group. For example, if the GER for girls is 100% and the GER for boys is 90%, the absolute gap is 10 percentage points.

- **Parity index**: calculated by dividing the performance indicator for one group by that of another group. Taking the example from the bullet above, the gender parity index (GPI) = Girls’ GER/Boys’ GER= 100/90=1.1. If the parity index=1.0 then there is perfect equality.

### 8.2 Inequality in learning achievement

#### 8.2.1 Gender disparities

To compare examination pass rates between girls and boys, and to look at the variation in this gap across the 10 districts, Figure 43 displays the range across districts of the GPI for pass rates in the Standard 7, Form 2 and Form 4 examinations. For Form 4, both the overall pass rate and the proportion of students with high enough grades to qualify for Form 5 – labelled the ‘Form 4 qualifying pass rate’ – are included.
Figure 43: Range of gender parity indices in examination pass rates across districts, 2013

Source: EMIS\Statistical Abstract 2013. Note: (1) The Form 4 results are for government and private school students combined. (2) The dashed line marks perfect gender parity (1.0).

Looking at the average GPI for each examination in Figure 43, there is little gender inequality in either the Standard 7 or Form 4 pass rates overall. This is not the case for Form 2 pass rates, where girls outperform boys, while boys outperform girls in passing the Form 4 examination and qualifying for Form 5.

The variation in the GPI for pass rates across districts increases with the level of the examination. The difference is already fairly large for the Form 4 pass rate, which ranges from 0.65 to 1.45, but the gap is extreme for the Form 4 qualifying pass rate. In one district no girls passed well enough to qualify for Form 5, yielding a GPI of 0 (North B), while in another district the pass rate was 2.6 times higher for girls than boys (Central).

Which districts are the most unequal in terms of examination performance by boys and girls? Is the relative performance of girls and boys across all the examinations consistent within districts? Table 23 provides some answers. There are some clear patterns in GPs for pass rates both between and within districts.
Table 23: GPI in examination pass rates by district, 2013

<table>
<thead>
<tr>
<th>District</th>
<th>Standard 7 pass rate</th>
<th>Form 2 pass rate</th>
<th>Form 4 pass rate</th>
<th>Form 4 qualifying pass rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>1.05</td>
<td>1.33</td>
<td>1.03</td>
<td>1.01</td>
</tr>
<tr>
<td>West</td>
<td>1.03</td>
<td>1.20</td>
<td>1.12</td>
<td>0.90</td>
</tr>
<tr>
<td>North A</td>
<td>0.88</td>
<td>0.90</td>
<td>0.83</td>
<td>0.57</td>
</tr>
<tr>
<td>North B</td>
<td>1.05</td>
<td>1.21</td>
<td>0.90</td>
<td>0.00</td>
</tr>
<tr>
<td>Central</td>
<td>1.17</td>
<td>1.22</td>
<td>1.22</td>
<td>2.63</td>
</tr>
<tr>
<td>South</td>
<td>1.22</td>
<td>1.20</td>
<td>1.45</td>
<td>2.34</td>
</tr>
<tr>
<td>Micheweni</td>
<td>0.95</td>
<td>0.93</td>
<td>0.65</td>
<td>0.55</td>
</tr>
<tr>
<td>Wete</td>
<td>0.97</td>
<td>0.95</td>
<td>0.90</td>
<td>0.24</td>
</tr>
<tr>
<td>Chake Chake</td>
<td>0.94</td>
<td>1.07</td>
<td>0.92</td>
<td>0.42</td>
</tr>
<tr>
<td>Mkoani</td>
<td>0.93</td>
<td>1.10</td>
<td>0.88</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Source: EMIS/Statistical Abstract 2013. Note: The dark-shaded cells show GPIs<1.0, indicating that boys’ performance is better than girls’.

Boys do comparatively better in examinations than girls in North A in Unguja and in the four districts in Pemba, with the exception of the Form 2 examination for Chake Chake and Mkoani. In sharp contrast, the girls from the Central and South districts of Unguja significantly outperform boys in pass rates. Performance in Urban and West districts also tends to favour girls, while the direction of gender disparity is mixed in North B.

There is also some evidence on gender disparities in learning from survey sources, which find that the subject makes a difference to the direction of gender disparity in performance. The 2007 SACMEQ survey found that Standard 6 girls have stronger reading skills in Kiswahili than boys, while boys performed better in mathematics than girls (Abdalla et al., 2011, p. 75). A similar finding comes from the Tz21 early grade reading and mathematics assessments given to Standard 1–4 students in 2013 (see Chapter 5). Results from this study found that in Kiswahili girls from all four Standards outperformed boys in recognising letters and reading words during timed tests. By contrast, in counting, addition and subtractions, boys did better than girls in all four Standards.

8.2.2 Geographical disparities

The absolute difference in examination pass rates across districts is fairly large, except for the Form 4 qualifying pass rate (Figure 44). The gap between the best and worst performing district in the Standard 7 and Form 4 examinations is 20 and 25 percentage points respectively. This is a huge geographical disparity in learning achievement.
Are districts consistent in their relative performance in the examinations? Looking at Figure 45, the answer is broadly no. There are only two districts which show some degree of consistency in their relative ranking. Central district in Unguja ranks between sixth and eighth place in the different examinations, so has moderate performance compared to other districts. Wete in Pemba does relatively better and ranks between second and fourth place. The remaining eight districts display huge variation in their rankings, which is surprising at first glance. After Standard 7, students may move to schools which are outside their home districts (especially high-performing students selected for biased streams), which may be distorting patterns. Also, the likely effects of selecting out weaker students after the Form 2 examination are difficult to determine.

Figure 45: District ranking of examination pass rates, 2013

Source: EMIS\Statistical Abstract 2013. Note: The districts are ranked from 1 (highest pass rate) to 10 (lowest pass rate).

Another source of evidence on geographical disparities in learning comes from the 2007 SACMEQ survey. This found that Standard 6 students from urban areas outperformed their rural peers by some margin in reading Kiswahili and in mathematics.
8.2.3 Wealth disparities in learning results

The little available evidence on disparities in learning based on students’ household background suggests that there is a sizable gap. The SACMEQ 2007 survey placed students into four equal groups based on their socioeconomic background. Students from the richest group had stronger reading Kiswahili and mathematics skills than the students from the poorest group (Abdalla et al., 2011, p. 75).

8.3 Inequality in enrolment capacity and exclusion

8.3.1 District and gender disparities in enrolment capacity

Does the availability and take-up of education vary according to the district where children live? The GER is an indicator of the capacity of the system to enrol all eligible children at current resource ratios, and Figure 46 shows that GERs vary enormously by district at pre-primary, primary and ordinary secondary level. The gaps between the districts with the lowest and highest capacity are 50 to 60 percentage points. It is clear that where a child lives makes a huge difference to whether school places are currently available and taken up.

It is important to highlight that in Zanzibar GERs are a reasonable proxy for schooling coverage (see Chapter 2 for reasons), which, given Figure 46 means, that there is huge geographical variation in the proportion of the population accessing the different levels of education.

Figure 46: Range of GERs (%) across districts by subsector, 2014

Source: EMIS/Statistical Abstract 2014. Note: The overall GERs implicit in the figure are slightly different to those presented earlier in Chapter 2 because of differences in the population estimates (see Box 1 in Chapter 2).

Which districts have the greatest availability and take-up of places, and which have the least? Is there a consistent pattern across the subsectors? Table 24 ranks districts from 1 to 10 according to their GER. Enrolment capacity at pre-primary is lowest in Wete and Chake Chake in Pemba. In these districts the equivalent of 10% (Wete) and 22% (Chake Chake) of eligible children are enrolled in pre-schools.

At primary and ordinary secondary level, Micheweni in Pemba and North B in Unguja stand out as having the lowest capacity to enrol eligible children (as measured by GERs). These districts only have capacity to accommodate 76% (North B) and 89% (Micheweni) of 7–13 year olds in primary
schools; and 41% (North B) and 38% (Micheweni) of 14–17 year olds in ordinary secondary schools.

Table 24: District ranking by GERs (%) 2014

<table>
<thead>
<tr>
<th>District</th>
<th>Pre-primary</th>
<th>Primary</th>
<th>Ordinary secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>4</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>West</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>North A</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>North B</td>
<td>5</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Central</td>
<td>7</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>South</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Micheweni</td>
<td>1</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Wete</td>
<td>10</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Chake Chake</td>
<td>9</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Mkoani</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: EMIS\Statistical Abstract 2014. Note: The districts are ranked from 1 (highest GER) to 10 (GER). The dark-shaded cells show the two districts with the lowest rank.

Is enrolment gender balanced across districts? At pre-primary and primary level, most districts are fairly close to gender parity in enrolment. GPI for GERs across the districts ranges from 0.97 to 1.1 at both levels. The situation is very different at ordinary secondary level, where enrolment of girls outnumberes boys in all districts; all GPIs for GERs are greater than 1.0 and the highest is 1.48 in North B. According to the EFA Assessment, a number of interventions have been implemented to promote gender equity and equality in education in Zanzibar. These include development of a gender-sensitive curriculum and learning materials, establishment of guidance and counselling, gender and HIV/AIDS units in the MoEVT, science camps for girls and training for female science teachers (MoEVT 2014a, p. 113).

8.3.2 Profiles of OOSC

About 15% of primary school-aged children are out of school, according to household survey data from 2010 (see Chapter 2). Looking at the personal and household characteristics of children that are most associated with being out of school can help to inform policy responses which target the barriers facing the most excluded groups.

For primary-aged children (7–13 years), Figure 47 illustrates that gender, location, socioeconomic background, and education of the head of the household are all factors associated with the likelihood of being excluded from school. Around three-quarters of children who are excluded will eventually enter primary school (see Chapter 2), but they will be over-age, which for many children raises the risk of future dropout.
A higher proportion of primary-aged boys are excluded than girls, and the gap is about six percentage points. A slightly larger gap in school exclusion, of 10 percentage points, is visible between the more marginalised rural children and their urban peers. Living in a household where the head has completed primary education or above is associated with a much lower likelihood of being excluded from school than if the head of household has no education. However, by far the largest disparity is related to household wealth. Children from the poorest 20% of households have a 40% chance of being out of school, while children from the richest 20% have a 7% chance of exclusion.

The factors associated with school exclusion do not operate in isolation, and children who fall into multiple categories are usually the most marginalised. In Zanzibar, for example, primary-aged boys from the poorest 20% of households have a 43% chance of not being in primary school, higher than any of the individual groups.

The profiles of secondary school-aged children (14–19 years) who are out of school are shown in Figure 48. For this older group of children, girls are as likely as boys to be excluded from school. For the other factors associated with school exclusion – location, household wealth and education of head of the household – the same disparities are present as for primary-aged children but the patterns are much less pronounced.
8.3.3 Children with disabilities

Measuring disability is challenging partly because there are many types of disability, and some are difficult to diagnose. It is generally agreed that education and population statistics tend to under-report the size of this group, so the statistics discussed below should be treated with caution.

According to data reported by schools, the total number of students with disabilities enrolled in 2014 was about 6,100 (Table 25). This represents just under 2% of all students in schools (public and private). To give some context to this figure, the population census two years earlier found that about 3–4% of children aged 0–19 years have a disability. Assuming that this group of young people should be similarly represented in the student population, this suggests that rates of exclusion are considerably higher for young people with disabilities than the averages presented in the previous section.

Table 25: Enrolment of students with disabilities in pre-primary, primary and secondary schools (public and private), 2014

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Number of students with disabilities</th>
<th>Total students</th>
<th>Share of students with disabilities (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary</td>
<td>495</td>
<td>38,808</td>
<td>1.3</td>
</tr>
<tr>
<td>Primary</td>
<td>4,074</td>
<td>253,462</td>
<td>1.6</td>
</tr>
<tr>
<td>Secondary</td>
<td>1,609</td>
<td>81,621</td>
<td>2.0</td>
</tr>
<tr>
<td>All levels</td>
<td>6,178</td>
<td>373,891</td>
<td>1.7</td>
</tr>
</tbody>
</table>


It may be beneficial for the MoEV to continue working with the National Council for People with Disabilities and the Department of Disability Affairs to make sure that data on the situation of education for children with disabilities is accurately captured and monitored. This can then feed into policy-making and into the effective targeting of resources.
8.4 Inequality in resourcing

Two of the most critical resources needed to deliver schooling are teachers and classrooms. These are also relatively costly, with salaries accounting for 90% of recurrent public spending for the MoEVT in 2014/15 (see Chapter 4). This means that the distribution of public teachers relative to pupils across districts is a crude proxy for the distribution of per pupil recurrent expenditure. The ranking of districts according to their pupil–teacher ratio (PTR) in public schools in Table 26 therefore gives an insight into inequality in public recurrent funding.

Table 26: District ranking of PTRs in public schools by subsector, 2014

<table>
<thead>
<tr>
<th>District</th>
<th>Pre-primary</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>West</td>
<td>7</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>North A</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>North B</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Central</td>
<td>6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>South</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Micheweni</td>
<td></td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Wete</td>
<td>1</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Chake Chake</td>
<td></td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Mkoani</td>
<td>9</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: EMIS/Statistical Abstract 2014. Note: The districts are ranked from 1 (lowest PTR) to 10 (highest PTR). The dark-shaded cells show the three districts with the lowest rank.

Districts in Pemba are the most disadvantaged in terms of public teachers; the three highest ranked districts (those with the highest PTRs) in Table 26 are all in Pemba. One reason for the imbalance in the PTR is the transfer of female teachers once they get married to districts where their husbands are. Typically this involves a transfer to an urban area in Unguja.

The distribution of public classrooms relative to pupils across districts shows a different pattern compared with teachers (Table 27). Two of the districts in Pemba, Micheweni and Mkoani, are relatively disadvantaged in classrooms and in teachers, but Urban and West districts in Unguja also rank highly. Urban and West make up by far the most populated region of Zanzibar, so it is perhaps not surprising that West has the highest pupil to classroom ratio for pre-primary and primary schools, while Urban has the greatest shortage of secondary classrooms.

31 The accuracy of this proxy could be improved by adjusting the distribution according to the proportion of teachers with different qualifications. The level of qualification affects teachers’ remuneration (see Chapter 4).
Table 27: District ranking of pupil–classroom ratios in public schools by subsector, 2014

<table>
<thead>
<tr>
<th>District</th>
<th>Pre-primary</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>8</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>West</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>North A</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>North B</td>
<td>6</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Central</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>South</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Micheweni</td>
<td>3</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Wete</td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Chake Chake</td>
<td>7</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Mkoani</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: EMIS\Statistical Abstract 2014. Note: The districts are ranked from 1 (lowest pupil to classroom ratio) to 10 (highest pupil to classroom ratio). The dark-shaded cells show the three districts with the lowest rank.

The table above shows a snapshot of the current situation, but it is also important to highlight that there had been considerable progress in the past five years in narrowing district disparities in classroom provision. The trends in pupil to classroom ratios for students from Standard 1 to Form 2, combined in Figure 49, show that gaps between districts have narrowed considerably. The steepest downward trends are for the districts with the highest ratios (West, Urban and Micheweni), which means that the Government has been targeting the districts with greatest shortages.

Figure 49: Trends in public pupil to classroom ratio for Standard 1 to Form 2 students by district


8.5 Some reasons for inequality in education

The EFA report (MoEVT, 2014a) highlights a number of constraints facing marginalised groups in the current learning environment. In most schools there are no latrines for children with physical disabilities, and in many schools infrastructure is not conducive to inclusive education (MoEVT, 2014a, p. 49, p. 146). Other barriers cited include a shortage of appropriate teaching and learning resources.
materials, reliable transport, and a lack of commitment to inclusive education by some teachers and parents (MoEVT, 2014a, p. 49).

### 8.5.1 Perceptions based on case study interviews

During interviews with head teachers and DEOs from Micheweni (Pemba) and North B (Unguja) for this report, some gave their views on why boys are more likely to be out of school than girls. In both districts there are coastal areas where fishing is a lucrative opportunity for boys particularly, although girls are involved in some types of fishing activities – especially seaweed collection in Micheweni. Poverty is an important factor in driving parental choice when there are work opportunities for their children, but some parents also see educated people who are unemployed or self-employed and this leads them to question the value of education. Seasonal work in farming tends to affect boys’ daily attendance more than girls’. Boys are also especially affected by pressure from their peer group to engage in truancy from school. On the question of why boys outperform girls at the end of ordinary secondary, suggestions were that girls help more at home, which affects the time they have for studying, and that boys tend to participate more actively during lessons.

The anecdotal observations above give only a flavour of potential reasons for the gender disparities discussed in this chapter. The forthcoming UNICEF study on OOSC is timely, and will provide a more systematic analysis of barriers facing children excluded from schooling in Zanzibar. Understanding the reasons underlying disparities in learning achievement probably requires primary research in classrooms to understand how different groups of children are learning and what school factors affect their progress.

### 8.6 Conclusions

There is considerable inequality in learning achievement, access to and resourcing of education at all levels.

Gender disparities are evident in learning outcomes and in rates of exclusion from school, but the picture is inconsistent. Boys of primary age are far more likely to be excluded from school than girls, putting them at greater risk of over-age entry or of never entering school. Girls also outnumber boys in secondary schools in all districts. Despite their greater exposure to schooling, girls perform worse than boys in the critical Form 4 examination which determines whether they will continue to Form 5. Gender disparities in learning may well start early. Evidence from a recent early grade learning assessment found that girls found mathematics harder than boys did, while the opposite was true in Kiswahili reading skills, where girls did better. Systematic qualitative research in classrooms would be useful in trying to understand the causes of this.

There are large geographical differences in examination performance, capacity and take-up of education, and in exclusion from school. Children of primary- and secondary-age are much more likely to be out of school if they live in a rural area. The capacity and take-up of education services is comparatively low in Pemba’s four districts and in North B (Unguja). Pemba is also relatively disadvantaged in teacher allocation, and some of its districts have some of the worst classroom shortages too.

Household poverty is the factor most strongly associated with primary- and secondary-age children being out of school. Careful consideration of both the direct and indirect private costs of education, as well as opportunity costs, at all levels is important in designing a coherent strategy to mitigate this barrier. The recent policy of abolishing voluntary parental contributions for primary students is a positive step, and should reduce barriers for poor families. Removing voluntary contributions at
the pre-primary level should also mean that children from poorer families can more easily access pre-primary education and enter primary school with the foundational skills necessary to access the curriculum. But parental contributions remain at the secondary level, which likely contributes to drop-out after the final year of primary and beyond.

Children with disabilities have considerably higher rates of school exclusion than average, and it is likely that there are other groups of marginalised children who are not visible in the available statistics. Among some of the barriers facing children with special educational needs are a lack of appropriate physical infrastructure and shortages of teaching and learning materials. The scale of the problem is not clear, and it would be useful to have more systematic data on material needs and current provision in order to prioritise resources to meet inclusive education goals.
9 ECD

Box 14: Key findings on ECD

- Between a quarter and half of Zanzibar’s children have access to pre-school; there has been considerable improvement in access over the past five years but is still low. Many of those who are enrolled are over-age. Of total enrolment in pre-primary centres, 55% are enrolled in privately run pre-schools and the rest in government schools or Tutu centres (2015).
- Income is a barrier to accessing pre-school, and this results in inequitable access. Children in the richest fifth of households are more than four times as likely to access pre-school as the poorest fifth.
- The Government is encouraging its primary schools to open pre-primary classes, but many details are yet to be worked out. Schools need to find enough space, and sufficient motivated and qualified teachers. The MoEVT has budgeted to supply materials to pre-schools, removing the need for voluntary contributions, but this has not been widely communicated. Implementation plans should be developed for the next five years based on different government sector growth scenarios, including the teachers, classrooms and finance needed and the likely implications for private providers and for primary schools.
- These new pre-primary classes attached to primary schools may suffer if the head teachers, teachers and parents are not well sensitised to the needs of ECE. The teaching style may be too academic, the content infiltrated by Standard 1 curriculum, and resources may be prioritised for higher levels in the school.
- Teaching at the pre-primary level has had a low reputation, not helped by the lack of training courses in Zanzibar. There will be some delay as new pre-primary teaching graduates are produced from the new courses at SUZA, MECP, TCs and education colleges. Teachers should be placed in a pre-primary classroom only if they choose to be there.
- Community schools and Tutu centres are largely under-resourced, and may not be sustainable. As government schools open, competition may drive these other options to close. The Government should be aware and clear about this likelihood, and include this in the implementation plan mentioned earlier.
- There need to be clearer, agreed standards on pre-primary school infrastructure and teaching and learning quality, with guidance on the curriculum, for effective monitoring and accountability to take place.

9.1 Introduction

In Zanzibar, ECD is taken as the period from birth to the first three years of primary education, or up until the age of eight. It refers to a wide range of services relating to health, nutrition, care and education which prepare children physically, emotionally, socially and educationally for their future development. ECD is therefore a multi-sectoral issue with aspects falling under the ministries responsible for health, agriculture, finance, education, and for the development of young people, women and children. This chapter will focus on the education aspects of ECD, since these are under the purview of the MoEVT, but also briefly summarise the wider ECD situation, drawing largely on the EFA Assessment (UNESCO and MoEVT, 2014), the UNICEF assessment of ECD services in Zanzibar (Kholowa and Mtahabwa, 2013), and Bartlett’s report on universalising pre-school in Zanzibar (2014).

This chapter begins with a brief look at the institutional and policy framework for ECD in Zanzibar. From here, the main services provided for ECD are described, focusing on the different types of schooling available for pre-primary children. The next section looks at what this service provision has meant for indicators of access – which children have access to ECE? Following this, we analyse in more depth questions of equity in access to pre-schooling. The last main section looks at aspects of quality in pre-school education, in terms of curriculum and standards, teaching staff, other resources, infrastructure and facilities. Finally, the main conclusions are drawn together.
9.2 Institutional structure

Zanzibar, as part of the United Republic of Tanzania, has adopted a number of international conventions relating to ECD (e.g. the 1989 UN Convention on the Rights of the Child, the 1990 African Charter on the Rights and Welfare of the Child, the 2000 Dakar EFA Framework, and the 2002 UN World Fit for Children). In addition, Zanzibar has its own national policies and action plans indicating ECD as a priority, such as MKUZA II, and Zanzibar Health Policy and Zanzibar Education Policy (summarised in Annex I). However, there is no integrated ECD policy, and the policy attention is fragmented.

A report commissioned by UNICEF (Kholowa and Mtahabwa, 2013) concluded there was no coordination framework for ECD in Zanzibar, with no clear roles and responsibilities for the various ministries and stakeholders. The Ministry of Empowerment, Social Welfare, Youth, Women and Children (MESWYWC) houses the coordination of ECD; however, in practice no institution has been monitoring the progress of ECD. MESCYWC started to review the previous children policy in 2012, and is expecting to develop an integrated Children Policy, clarifying roles and improving coordination of early childhood issues.

In terms of education, the 2006 Zanzibar Education Policy formalised and integrated pre-school education into the formal system. Two years of pre-schooling is now part of the 12-year compulsory basic education and should be available for all children between ages four and five. To achieve increases in pre-school enrolment, the 2006 Education Policy called for partnerships with communities and NGOs to establish pre-schools, particularly in rural areas. Many private and community owned pre-schools actually provide three years of pre-school education.

Due to its nature, tracking the financing of ECD is complex since it involves a number of different ministries and activities within them. Participants in the UNICEF study reported that MESWYWC receives less than 2% of the national budget (of which only some parts contribute to ECD), and that most funding comes from development partners such as UNICEF and Save the Children. In the MoEVT, recurrent spending on pre-primary is categorised together with primary, so it is difficult to separate primary from pre-primary expenditure.

9.3 Service provision

9.3.1 Health and nutrition services provision

The Ministry of Health provides health and nutrition services for children up to the age of five and their mothers. These include birth registration, promotion of breastfeeding, complementary feeding, child-feeding practices, immunisation, community-integrated management of childhood illnesses, and parents’ education at primary health care units. Access to these services is generally good, and all communities are within a five-kilometre radius of such a unit. A full review of these services can be found in Kholowa and Mtahabwa (2013).

9.3.2 ECE provision

In ECE, Zanzibar has various types of pre-primary centres which generally aim to prepare children for starting primary Standard 1. These centres fall into three broad categories and had the following numbers of centres in 2015 (Figure 50):

- Government pre-schools, which can themselves be standalone schools or pre-primary classes within a primary school: the EMIS data underestimates the number of government pre-primary
schools; there are apparently 31 of the standalone schools (reported in EMIS), and 79 primary schools opened pre-primary classes in 2015 (up from four in 2014).

- Tutu centres, which are government-run classes where the children learn through guided radio programmes, with a community volunteer to facilitate. In 2015 there were 260 of these centres.
- Private pre-schools, which include all those not run by government. These include MECP community centres (currently 81), and other schools run by communities, NGOs and private organisations. In 2015 EMIS recorded 246 of these schools. This may be an underestimate if there are unregistered schools, given the figures suggested by the Association of Private Schools (see section 9.3.4).

Between 2005 and 2015 the total number of pre-primary centres has increased from 205 to 537. The proportion of centres which are government-run has increased from 12% to 54% in that time. All three types of school/centre are supposed to be registered with the Ministry and follow government standards and the Government curriculum. In practice, some private schools choose to follow different curricula, such as those from other East African countries.

In addition to these pre-schools there is the Quranic school system which runs in parallel. Quranic schools are held either before or after the mainstream schools, so children can attend both.

![Number of pre-primary schools](chart.png)

**Source:** EMIS (Statistical Abstract and Budget speeches). Tutu centres in 2007–2009 from the e-learning division. Note that RISE programme numbers are not consistent with those in the budget speeches.

### 9.3.3 Government schools

Government pre-schools were initially established across the country as role models for private, NGO- and community-provided institutions. The Government is now encouraging primary schools to open pre-primary classes as part of the effort to increase pre-primary enrolment. Although they are not reported by EMIS, according to the Pre-Primary and Primary Department at the MoEVT, at least four schools opened these classes in 2014 and in 2015 there were 79 in total. A large number of classes are expected to open in 2016. These attached schools will benefit from access to the infrastructure and leadership of the primary school; however, the specific needs of early years education could be neglected. The MoEVT recorded over 11,000 children in government pre-primary (standalone and attached classes) in 2015.

Stakeholders met for this analysis raised concerns that the rapid expansion of pre-primary provision attached to primary schools will come at the expense of quality. Teachers may be less
interested in the early years and teaching may be biased towards methods suitable for older children. There may be pressure within the school to start the Standard 1 curriculum in pre-primary due to the heavy curriculum load. Primary toilet facilities are not suitable for smaller children. If attached to a primary school, the funds intended for pre-primary may be diverted to primary activities. These perceptions do imply potential risks and the Ministry may want to plan strategies to mitigate these.

While the President announced on 12 January 2015 that primary school would become free, with voluntary contributions abolished, he did not explicitly mention the situation for pre-primary. The MoEVT budgeted almost TZS 19,000 per child in government pre-primary schools in 2015/16. The previous recommended voluntary contribution was TZS 5,000 per month (TZS 55,000 over the 11-month school year) – significantly higher than the recommended TZS 3,500 per year for primary. The high cost was apparently in part due to schools providing a meal. Removing the expectation for parents to contribute will make government schools more attractive relative to private (including NGO and community) schools and jeopardise quality if the resources are not replaced. It is important that the situation on financing pre-primary education is communicated to parents soon, and strategies put in place to manage changing pressures on the pre-primary school sector.

To cater for the expansion of pre-primary in government schools, the Ministry is suggesting using teachers who are newly recruited and redistributing teachers from primary schools. Head teachers are expected to discuss this with their teachers and select teachers who agree to move, and this was happening in some schools visited for this analysis. A number of interviewees and reports say that teaching pre-primary is not popular; it is seen as less advanced than primary and therefore a demotion. The MoEVT has been working to improve the reputation of pre-primary teaching through discussions with teachers, emphasising that pre-primary is now a responsibility of the school and comes with additional training in terms of a six-month bridging certificate in ECE, with support from MECP (see below). There is a wider problem of getting teachers who are adequately trained in ECE into pre-primary classrooms (see Box 15 and section 9.6 below).

Box 15: Pre-primary classes at Karange Primary School, North B district

Karange primary school opened pre-primary classes in 2012. There are approximately 40 students in two classes: nursery for four to five year olds and junior for five to six year olds. There are two classrooms and four teachers (two per class), who were all primary teachers in the same school before being appointed to pre-primary. These teachers were not sure how they had been selected, but after initial disappointment, they had now accepted teaching pre-primary. Two of the teachers have now completed the six-month MECP bridging course (see Box 16) in ECE, and felt it had taught them how to prepare teaching and learning materials, to use groups, to engage children and to deal with conflict. Another teacher, who has a certificate in primary, attended a one-off training course in 2013. The final teacher has not had any ECE training.

The teachers had copies of the syllabuses and were following them closely, but mentioned preparing teaching and learning materials at home for so many pupils, and the lack of textbooks, as challenges.

Another problem is physical space: if classrooms are reserved for pre-primary, this gives less space for primary, which is already overcrowded (see Chapter 6). Although double-shifting is rare in pre-primary (less than 3% of pre-schools use double-shifting), this may be encouraged more in future.

9.3.4 Private schools

Private pre-schools are the most common form of ECE provision in Zanzibar up to now. The Zanzibar Association for Private Schools had registered 385 pre-schools as at April 2013 (Kholowa

32 In fact a declaration was made in 1964 to make education free, but in the 1990s parents were asked to make a small contribution to their children’s education. The President’s announcement on 12 January 2015 abolishes this contribution.
and Mtahabwa, 2013) – notably higher than those recorded in EMIS – and this number is thought to be increasing faster than the association can maintain updated records. Within the broad category of private schools, there are those which are truly privately run, those established and supported by MECP (see 9.3.4.1 below), and other community schools. The Ministry recorded almost 23,000 children enrolled in these schools in 2015.

Privately run schools vary in terms of their quality, infrastructure, teacher capacity and play and learning resources. They range from more expensive, well-equipped elite schools to smaller, low fee schools, particularly in peri-urban areas. There is a perception that they cater to parents’ demands, which usually focus on the English language and knowledge of letters and numbers. Fees vary considerably, from between TZS 20,000 and TZS 150,000 a month (Bartlett, 2014).

Schools run by communities (rather than for-profit private entities, and excluding the MECP schools) are reportedly the single largest provider in Zanzibar. These are likely to have been set up with encouragement from prominent members of the community, and may have support from the religious community too. Teachers are locally recruited and sent for training. One school mentioned by Bartlett (2014) charges TZS 7,000 per month in fees, which included two meals per day and has specialised English and Arabic teachers.

9.3.4.1 Madrasa Community Schools

A number of community schools were established by the MECP (formerly the Madrasa Resource Centre). The MECP began working in Zanzibar in 1989, aiming to build the capacity of communities to provide ECE and development. Since then, the MECP has supported 84 communities to establish, own and manage pre-schools, of which 81 are still running. The MECP still supports these schools in terms of materials and teacher training.

Teachers in the MECP centres are locally selected and have been trained by the MECP, and are generally found to be confident in handling children and creating interactive learning. They are given very low salaries depending on what the community is able to raise. As a result, teacher motivation tends to be low (Kholowa and Mtahabwa, 2013).

A challenge for the community schools is sustainability and funding. Without any external funding, the centres rely on contributions from families, ranging from TZS 1,000 up to TZS 5,000 per month. With usually around three teachers for a centre of 40 to 50 pupils (and a PTR of 15–20:1), the family contributions are not enough. The situation is also not sustainable for communities who struggle to find funds. New government pre-primary schools opening nearby create competition, particularly if their fees are lower or government bans contributions altogether. It is likely that over time the MECP schools will close, due to unsustainable finances and either a lack of will or a community decision to hand the school over to be government-run. There are often calls for the Government to support MECP schools, such as through paying teachers' salaries, but so far this has not been taken up by the Government.

More information on the work MECP has done to support pre-primary education in Zanzibar is given in Box 16.
Box 16: The MECP in Zanzibar

The MECP is the leading non-profit organisation working in ECE in Zanzibar. It has been working for over 25 years to promote community-driven, holistic ECD. Over that time their work has had a range of dimensions:

- Supporting community mobilisation activities for communities to set up pre-schools.
- Training hundreds of SMC members to increase the sustainability of ECD centres.
- Identifying community resources teams made up of figures in the community with the technical skills to support the SMC.
- Improving professional development of ECD teachers, and training over 2,000 teachers across Unguja and Pemba, mostly from private schools but also community schools.
- Developing appropriate, culturally relevant learning materials at no or low cost. They have now published 15 books, and are distributing these to the community pre-schools.

The MECP is now supporting the roll-out of universal pre-primary schooling in a number of ways:

- It is supporting 100 government primary schools opening pre-primary classes, providing each with a starter pack of basic teaching and learning materials, worth USD 50 (around TZS 100,000).
- It has introduced the idea of clustering – linking the group of local feeder pre-primary centres to a primary school, so they work together and share information. This gives an opportunity for schools to discuss their common challenges, successes, methods of mobilising resources, and mentor each other.
- Three courses of teacher professional development are being provided:
  1. ECE Certificate: 200 Form IV graduates are being trained to work in their local government pre-primary schools. This is a two-year course, with three days a week teaching and two days a week studying. On receiving the certificate, the teachers can open their own pre-school or look for a government teaching position. This course costs around TZS 2.4 million per student, and while some students pay TZS 50,000, most have their fees paid by the MECP. It is left to the head teacher’s discretion whether to pay an allowance.
  2. Specialised course: A six-month training for a certificate in ECE for 280 primary teachers with a ‘grade IIIA’ certificate from the 100 identified government schools. These sessions are held at weekends and on public holidays, and there is mentoring within the school. With this certificate they are eligible to enrol on the ECE diploma at SUZA. The marginal cost is around TZS 600,000 per teacher (exclusive of operational costs and trainer salaries).
  3. Bridging course: A six-month re-training and upgrading for teachers trained previously by MECP so that they will have ECE certificates recognised by the MoEVT. This training course takes place in TGs, again lasting six months and costing around TZS 600,000 per teacher.

The MECP worked with the MoEVT in developing the second and third of these three courses. The Vocational Training Agency has registered the MECP as a training institution.

MECP funding has largely come from the Aga Khan Foundation, as well as grants from Dubai Cares.

9.3.5 RISE or Tutu centres

The Radio Instruction for Strengthening Education (RISE) programme was established in 2006 as a strategy to stimulate enrolment in pre-primary education in response to the 2006 Education Policy. The motto of the programme is ‘Tucheze Tujifunze’ (Tutu) which means ‘learning through play’. RISE aims to build the capacity of communities, districts and national institutions to establish and run Tutu centres.

Tutu centres hold classes for pre-primary children in which the class listens to interactive 30-minute radio programmes aired on Zanzibar Broadcasting Corporation. The centres are managed by locally selected ‘mentors’ who receive eight days initial training on the programme and class management, and occasional refresher training. Initially, 45 Tutu centres were established in two districts, but by 2015 there were 260 centres across five districts, with enrolment of 8,000 children. Despite this continued enthusiasm for the programme, Tutu centres are intended only to

33 In 2015 there are Tutu centres in North A, North B, West, Micheweni and Mkoani.
fill a gap where no pre-primary school exists. Once government primary schools have opened pre-
primary classes, Tutu centres are expected to be dissolved where they are no longer needed. A
transition plan for the opening of pre-primary classes and closing the Tutu centres, including the
implications for mentors, is needed.

USAID funded the programme for the first five years, and then the running of RISE was handed to
the MoEVT in 2008. The day-to-day running is managed by the Department of Pre-Primary and
Primary, who have an officer for Tutu centres and coordinators in each district. The production and
broadcasting of radio programmes is managed by the E-learning Division (in the Department of
ICT). Improving and expanding the RISE programme is a priority under the current GPE project,
finishing in December 2016. The E-learning Division are planning to develop new radio
programmes in 2016, to reflect the finalised curriculum (which includes more writing and speaking
in addition to listening, and more numeracy), and to ensure it is more competency-based.

**Box 17: Tumbe Kojifa Tutu Centre, Micheweni District**

This Tutu centre has 45 children aged between three and seven years old; they are split into Nursery and
Primary Standard 1 (children who are meant to join Standard 1 after finishing in the Tutu centre, but are
over-aged). The centre is open three days a week, from 7.30am to 12pm. The Nursery students come
from 7.30am to 10am, and Primary 1 from 10.30am to 12pm (according to when the radio programmes
are aired). Slow learners in Standard 1 join the Nursery group also. The centre is run by two women, who
receive the monthly allowance from the MoEVT of TZS 30,000. The head of centre, or ‘chief mentor’,
completed Form IV in 2007 and was trained by the RISE project in 2008: a four-day training followed by
two days every month for the first year, held at Dodeani Community Technical School. The assistant
finished Form II and since joining the centre in 2009 has not received RISE training. The mentors’
commitment was notable.

The centre is visited by ICT inspectors up to three times a month, and by the DEO every two to three
months. These visits are used to see how the children are learning, to assess discipline, and to see if they
are following the instructions in the radio programmes. The radio was provided when the centre opened in
2008, and is still working, though looking worn – it is likely to need replacing soon.

The community has a strong commitment to sending their children to pre-school; however, there are some
drop-outs, particularly over-age children. Helping parents to farm seaweed was a major cause for dropout
across the school levels in Micheweni. Poverty was not felt to be a serious problem – the centre is free for
children, who are sometimes asked to pay TZS 100 towards chalk, and the Standard 1 parents buy books
and pencils.

The major challenge at the centre is space. They do not have their own building, and instead are using
one room in the house of a family member. While this shows the community’s commitment to supporting
pre-primary education, it prevents the mentors from creating a child-friendly environment for the children.
Teaching and learning materials are stored away from the classroom, limiting the children’s access to
these materials. There were clothes hanging to dry in the room when we visited.

**Figure 51: Photos from Tutu centre: using a room within a house**
9.3.6 Quranic classes

Although not part of the formal education system, Quranic classes are an important part of ECE in Zanzibar. Over 95% of Zanzibari children attend classes for Quranic and Islamic education, and this is normally alternated with the formal school system, such that children would attend preschool in the morning and Quranic school in the afternoon (UNESCO and MoEVT, 2014). Children start attending a madrasa at the age of four. In 2011, there were 2,175 Quranic classes across Zanzibar, with the enrolment of over 276,000 children and almost 9,000 teachers, of which two-thirds were male (UNESCO and MoEVT, 2014). The MoEVT recognises these classes through registration, and organises some training in child-friendly methods and provides some materials. However, teachers are not formally trained and there is no common curriculum.

9.4 Stocktaking of early childhood indicators

9.4.1 Health and nutrition indicators

A full outline of health and nutrition indicators for ECD is given in the EFA Assessment, UNESCO and MoEVT (2014). The key indicators are replicated in Table 28 below. The headline figures of infant and under-five mortality both improved in the period from 2002 to 2010. However, some of the nutrition indicators (stunting, being underweight, wasting, access to Vitamin A supplements), as well as de-worming, all worsened between the two most recent reporting periods. In fact Vitamin A and de-worming indicators saw significant improvement and then worsening again within the period mentioned. A main reason for this was that the earlier period had a national campaign supported by UNICEF on health and nutrition, and after funds stopped in 2011 the indicators fell. The immunisation rates also fluctuated widely, due to the availability of funds.

Table 28: Health and nutrition indicators for selected years

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Earlier (year)</th>
<th>Later (year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth registration</td>
<td>-</td>
<td>78.7% (2012)</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>89 / 1,000 (2002)</td>
<td>51 / 1,000 (2010)</td>
</tr>
<tr>
<td>Under-five mortality</td>
<td>141 / 1,000 (2002)</td>
<td>73 / 1,000 (2010)</td>
</tr>
<tr>
<td>Stunting in under-fives</td>
<td>23.0% (2005)</td>
<td>30.0% (2010)</td>
</tr>
<tr>
<td>Being underweight in under-fives</td>
<td>18.7% (2005)</td>
<td>19.9% (2010)</td>
</tr>
<tr>
<td>Wasting in under-fives</td>
<td>6.0% (2005)</td>
<td>12.0% (2010)</td>
</tr>
<tr>
<td>Households using iodised salt</td>
<td>30% (2001)</td>
<td>44% (2010)</td>
</tr>
<tr>
<td>Vitamin A supplementation</td>
<td>57.7% (2005)</td>
<td>57.0% (2013)</td>
</tr>
<tr>
<td>Children under-five receiving de-worming treatment</td>
<td>54.9% (2005)</td>
<td>55.4% (2013)</td>
</tr>
<tr>
<td>Diphtheria, pertussis, and tetanus-HepB-Hib3 immunisation coverage</td>
<td>82.4% (2001)</td>
<td>85% (2012)</td>
</tr>
<tr>
<td>Measles immunisation coverage</td>
<td>83% (2001)</td>
<td>96.4% (2012)</td>
</tr>
</tbody>
</table>


9.4.2 Access to ECE

Depending on the source and whether unregistered pre-schools are included, estimates suggest that between a quarter and half of Zanzibar’s children have access to pre-school (Bartlett, 2014). In Zanzibar the pre-primary GER has increased from 27% in 2010 to 33% in 2015 (Figure 52). The net enrolment rate calculated by EMIS in 2014 was 20.5%. Enrolment is highest in private schools (which includes community schools), with almost 23,000 children enrolled in these schools in 2015.
(55% of total enrolment), compared with 11,000 in government schools and 7,800 in RISE centres. In addition, it is likely these numbers are underestimates given the possible low coverage in data collection from unregistered schools. The GER is further underestimated by the use of population data for a three-year age range (four to six year olds).  

Figure 52: Enrolment by pre-school type and gross enrolment ratio in pre-school

![Enrolment by pre-school type and gross enrolment ratio in pre-school](image)


The gap between net and GERs indicates that children are joining pre-school (and therefore also primary standard I) over-age. This is shown clearly in Figure 53, where only 21% of Pre-primary I children in government schools and 23% in private schools are four years old (the correct age), and more than two out of five children are aged six or above. Bartlett (2014) found in many cases that late enrolment was the result of an active choice by parents, who felt that their children were not ready for the burdens of Standard I at the age of six.

Figure 53: Age distribution of children in Pre-Primary class I, 2014

![Age distribution of children in Pre-Primary class I, 2014](image)

Source: EMIS.

In order to increase enrolment at pre-primary, the MoEVT has been running community mobilisation campaigns using media (radio) broadcasts, banners and theatre groups to convince parents of the importance of pre-primary education.

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34 Three years are used because private schools are still offering a three-year course, but given that public schools do not, this inflates the denominator and reduces the GER.
9.5 Equity

Access to pre-primary education is uneven across the country. In 2012 it was reported that of the children enrolled in pre-school, only 18% came from rural areas. This is far below what would be expected, given that according to the 2012 census 53.7% of the population live in rural areas (MoEVT Budget Speech 2012/13, cited in Kholowa and Mtahabwa, 2013). Data from 2014 suggests that GERs are generally higher in the district of Unguja than Pemba (Figure 54) – with the extreme exception of Micheweni, which has a very high GER.

Figure 54: Gross enrolment ratios in pre-primary by district, 2014

Source: EMIS. Note these GERs are calculated using population data which has not been smoothed, so the total GER for Zanzibar is higher here than shown in Figure 52.

Income is a barrier to accessing pre-school, and results in inequitable access. Kholowa and Mtahabwa (2013) found that many of the most vulnerable children are not accessing ECE services due to household challenges and the inability to pay fees. This is highlighted by the rate of participation in pre-school by income quintile, where children in the richest fifth of households are more than four times more likely to access pre-school than the poorest fifth (Figure 55). In addition, participation in pre-school barely improved for the poorest households between 2005 and 2010.

Figure 55: Rate of participation in pre-school by quintile

Related to this, children joining Standard 1 in private primary schools are more likely to have had previous ECE experience than those in public schools, suggesting that parents who can afford and choose private schools were more likely to have been able to pay for pre-school also (Figure 56A).

**Figure 56: Proportion of students in primary Standard 1 who have previously attended ECE, 2012–2014**

A: Split by government and private schools

B: Split by gender

Source: EMIS.

Gender does not appear to be an issue in terms of access to pre-primary school – if anything, it seems girls are more likely to access pre-school than boys. The GPI on GER for Zanzibar at pre-primary is 1.02, suggesting that more girls are enrolled than boys. Figure 56B shows that girls are more likely to have had some pre-primary education than boys are.

### 9.6 Quality

The standards for pre-primary education are set by the MoEVT, and despite perceptions that standards on quality and delivery methods are lacking (see Kholowa and Mtahabwa, 2013), they are becoming more uniform and more widely acknowledged.

Curriculum and development of teaching and learning materials are managed by the ZIE. The curriculum was developed in 2007 and revised in 2012, and is to be the standard for both public and private pre-primary schools. The curriculum covers six subjects: science and technology, mathematics, Kiswahili, religion, arts and crafts, and English. The main aim of the curriculum is to equip children with the three ‘R’s – reading, writing, and arithmetic – in preparation for Standard 1. In English, for example, the curriculum focuses mostly on language comprehension (speaking and listening), with pre-reading and pre-writing (letters, simple words and numbers). There is acknowledgement that due to the primary curriculum being overloaded (particularly with the abolition of Standard 7), some topics have shifted down to the pre-primary curriculum, which may not be appropriate for such early grades. In a study of options for universalising pre-primary in Zanzibar, Bartlett (2014) infers that the pre-primary curriculum is also overloaded and that it emphasises knowledge acquisition, encouraging teachers to use rote-learning techniques, rather than more active approaches more suitable for young children.

In addition to the curriculum there are pre-primary syllabuses, setting out topics, objectives, teaching/learning techniques, materials and how many periods it should take. The syllabuses have

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35 This is from discussion with ZIE, but other sources also include Arabic and games/sports.
been distributed to TCs and some schools and teachers visited for this analysis had access to it. ZIE has also led development of new pre-primary books, with GPE funding.\textsuperscript{36}

Quality of schools is monitored by the Office of the Chief Inspector at the MoEVT. Inspections tend to focus on physical infrastructure and administration rather than teaching and learning.

In principle, private schools are supposed to follow the same standards and curriculum as government schools. When private schools are registered they are inspected to check that they meet the required standards. In practice, private schools sometimes use other curricula (such as from other countries), and use different books. It is a challenge to regulate private schools, although the registrar supposedly has the authority to close them down if they do not meet standards. The 2006 Policy proposes establishing a body to coordinate private schools, which may be useful so long as there really are instruments to monitor and hold private schools to uniform quality standards.

Given the problems of lacking information and insufficient regulatory authority over private schools, the rest of this section focuses on government schools.

\textbf{9.6.1 Teachers}

Zanzibar is facing a challenge with supplying enough trained teachers for the further expansion of pre-primary education. The PTR in government schools is 21:1 (see Figure 57),\textsuperscript{37} against a target in the ZEDP of 15:1 by 2015. However, discussion with officials suggests that the PTR should be 20:1 (with around 40 children per class, but two teachers). Private pre-schools have more teachers, with a PTR of 17:1. The PTR varies widely across districts, and for government schools is highest in Chake Chake, Mkoani, Micheweni and West districts, highlighting some overall problems in teacher distribution and retention. Projections of teacher demand in Chapter 6 show that if pre-primary GER increases to 50\% by 2020, around 250 to 350 new teachers will be needed each year to maintain the current PTR. Note that the average PTR does not necessarily reflect the actual number of children being taught by one teacher. In cases especially where there are shortages of classroom space, there may be larger classes and teachers underutilised.

One solution to supplying the teachers required at pre-primary level has been for primary schools to identify existing teachers and move them to pre-primary classes. Implementation of this approach has been interpreted differently by different schools and DEOs. In some cases, head teachers have sought to find teachers among their staff who are keen to work with younger children. In other cases, reallocation is seen more as a demotion, and teachers who are low performing, or nearing retirement, have been selected. There are cases where teachers have received a letter informing them of their move, without any prior discussion. Nationally, there is also some discussion of deploying excess primary teachers into pre-primary. These strategies risk diminishing the reputation of pre-primary, such that few teachers would actively seek to work in the lower years, as well the immediate impact on quality due to placing teachers there who are not suited and motivated to the task.

\textsuperscript{36} These would be used in government pre-primary schools, whereas Tutu centres have their own materials, though based on the same curriculum.
\textsuperscript{37} Mentors in Tutu centres generally do not have the qualifications to train as teachers, so are not included in this discussion.
In addition to having the right numbers, pre-primary teachers need to have the right training. Kholowa and Mtahabwa (2013) report that the quality of stimulation in early childhood centres is a serious challenge. Many teachers, particularly those who are untrained, have a bias towards a formal teaching style. They also found a general lack of awareness of ECE practices. The study authors did find that some government pre-schools visited had locally made resources. In addition, the MoEVT TCs help in continuous professional development of government pre-school teachers.

The Ministry’s annual school census shows that currently only around 7% of government pre-primary teachers are untrained, compared with 62% in private schools (Figure 58). An impressive 84% of government teachers have a certificate, and 9% a diploma. However, these qualifications are almost all in fact in primary, rather than pre-primary. Until recently Zanzibar’s institutions did not offer ECE teacher training, and only a handful of teachers have received training at mainland institutions.

Until recently there were no official training institutions for certificates in pre-primary education in Zanzibar. Although not a full qualification, many of the primary-trained teachers who teach in pre-schools have received some in-service training (short courses, seminars) in ECE provided by institutions such as MECP and the TCs. All the TCs run courses on ECE, and two TCs focus specifically on ECE. Box 18 gives an example of in-service training being run by the TCs.
Box 18: Mfenesini Pre-primary school and in-service training at Saateni TC

Mfenesini pre-primary school is a standalone pre-school, and has six teachers to cover its 154 children in three classrooms. All the teachers have been trained to certificate level in primary teaching, but have not been trained in ECE. Two teachers are currently attending an in-service programme run by Saateni TC. The training takes place at the TC once a week, and uses materials from the RISE programme (including the audio-guided lessons). When back at the school, the two teachers attending the training work with the other four teachers to pass on what they have learned.

There are now efforts by stakeholders to put together training programmes for ECE staff at certificate and diploma levels. These options include:

- A two-year diploma by SUZA, starting in November 2015, and plans for a degree to start in 2017.
- MECP has established three routes to attaining a recognised certificate in early childhood (see Box 16 above):
  - The two-year certificate in ECE for new teachers;
  - A six-month specialised course for primary teachers to qualify them with a certificate in ECE; and
  - A six-month bridging course for MECP-trained teachers whose previous training was not recognised at certificate level by the MoEVT.
- An 18-month ECE certificate course to upgrade existing primary teachers who have chosen to move to pre-primary, run by the E-learning division and Teacher Education Departments.
- The Abdul Rahman Al-Sumait Memorial University (formerly University College of Education Zanzibar) runs courses leading to award of certificates and diplomas.
- The Mazizini Islamic College is about to establish a certificate in ECE.

These institutions are all working on improved training opportunities. Coordination appears to be relatively successful, with staff from various institutions working together (for example, the Head of E-learning was involved in developing the SUZA diploma). A further step needed is to develop and share a curriculum for ECE teacher training. While there is a curriculum for pre-school children, each teacher training institution has developed its own curriculum and materials in response.

Box 19: The Early Childhood Advancement Certificate Programme (ECACP) for upgrading primary teachers to pre-primary

The E-learning division and Teacher Education Department at the MoEVT are collaboratively running the ECACP programme. This programme is for existing primary teachers who have agreed to move to pre-primary, awarding a certificate in ECE. The course is a mixture of distance and in-service, and lasts 18 months. The teachers spend two days a week in the TC (one of which a Saturday) and four days teaching in pre-primary classes. The programme uses a combination of three methods:

- Radio: teachers follow a radio programme during lessons, learning different techniques for teaching pre-school content. They have guidebooks to take them through the questions, prepare lessons themselves using the radio lessons as a model, and discuss and reflect with colleagues at the TC.
- Video: six self-directed learning modules, each with four videos; one video and its exercises takes a day. These are more about pedagogy: teaching strategies, structured play, physical activities, communication and classroom management.
- Workshops: modules carried out through workshops with the other student teachers at the TC.

The first cohort has 350 teachers, who started the course in January 2015 and should finish in May 2016. This course development and delivery has been funded by the GPE project, and it is unclear whether there will be funding to train further cohorts. However, the materials that have been developed are available for re-use. Ongoing costs would be the allowances for teachers (which cover their travel, for example) and allowances for trainers (who are usually teachers themselves who have been trained as master trainers in ECE). These costs are estimated at TZS 1.8 million per teacher, but due to constraints the current programme is delivered for under TZS 900,000 per teacher. Note that this is still higher than the cost of the
specialised course run by MECP, which is TZS 600,000 per teacher.

It was apparent that the e-learning division now has substantial capacity and experience in developing interactive teaching and learning materials using information and communication technology. This resource should be maintained and used for future training needs, such as upgrading primary teachers’ skills in English language instruction, or mathematics and science teaching.

9.6.2 Resources

Most pre-schools have adequate locally and factory made materials, but around half of centres visited for the UNICEF study did not have outdoor equipment. Often outdoor equipment could not be used due to lack of security at the centre grounds.

Distribution of resources is not even. Public pre-primary schools vary in their access to books. Figure 59 shows the ratio of pupils to language books in government pre-primary schools across the districts. The West, North A and North B districts have the highest ratios, meaning fewer books and more children having to share. Pre-primary schools are supposed to have books in mathematics, languages, arts and crafts and religion, which MoEVT provides. However, the last time the Ministry bought books was five years ago (so newly opened pre-primary classes would not have any). ZIE is now producing new books for pre-primary schools, which are at the printing stage.

Figure 59: Pupil to language book ratios in government pre-primary schools, 2014

Source: EMIS.

9.6.3 Infrastructure

In 2014, on average there were 33.7 pre-primary children for one classroom in government schools, and less than 3% of schools operated a double-shift (EMIS, 2014). There are concerns about how enough space will be found when the uptake of pre-primary education increases. Many primary schools are challenged by too few classrooms for their enrolment (see Chapter 6), and opening pre-primary classes will only increase this shortage of space for primary. Interviews with MECP suggest that the normal government standard primary classroom can fit two pre-primary classes in (providing they are each around 15 to 20 children), and this fits with views at the Department of Pre-Primary and Primary that there should be 40 children to a classroom and two teachers. The difficulty is then likely to come in the reduced space available for primary classes, given then one classroom has been reserved for the pre-primary children.
9.6.4 Water and sanitation

Four out of five schools have access to water, and generally more private pre-schools have water than government schools (Table 29). Centres access drinking water most commonly from pipes, but also wells and boreholes, almost always within the centre premises (Kholowa and Mtahabwa, 2013). The majority of schools had toilet facilities: over half had pit latrines and over one-third had flush toilets; almost all had a separate toilet for boys and girls. However, most toilets were designed for primary school children and therefore are less suitable for smaller children. Data from 2014 shows that on average around 40 girls share a toilet, and in government schools the number is similar for boys, but in private schools there are 88 boys on average to one toilet (Table 29).

Table 29: Pre-primary schools access to water and toilet facilities, 2014

<table>
<thead>
<tr>
<th>District</th>
<th>% of schools with water</th>
<th>Pupil–toilet ratio (Male)</th>
<th>Pupil–toilet ratio (Female)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gov’t</td>
<td>Private</td>
<td>Total</td>
</tr>
<tr>
<td>Urban</td>
<td>100%</td>
<td>90%</td>
<td>91%</td>
</tr>
<tr>
<td>West</td>
<td>86%</td>
<td>95%</td>
<td>94%</td>
</tr>
<tr>
<td>North A</td>
<td>62%</td>
<td>86%</td>
<td>70%</td>
</tr>
<tr>
<td>North B</td>
<td>78%</td>
<td>87%</td>
<td>83%</td>
</tr>
<tr>
<td>Central</td>
<td>88%</td>
<td>79%</td>
<td>84%</td>
</tr>
<tr>
<td>South</td>
<td>75%</td>
<td>100%</td>
<td>92%</td>
</tr>
<tr>
<td>Micheweni</td>
<td>88%</td>
<td>100%</td>
<td>94%</td>
</tr>
<tr>
<td>Wete</td>
<td>100%</td>
<td>86%</td>
<td>91%</td>
</tr>
<tr>
<td>Chake Chake</td>
<td>80%</td>
<td>100%</td>
<td>89%</td>
</tr>
<tr>
<td>Mkoani</td>
<td>70%</td>
<td>100%</td>
<td>85%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>81%</td>
<td>93%</td>
<td>89%</td>
</tr>
</tbody>
</table>

Source: EMIS.

9.7 Conclusions

This chapter has focused on the current situation of ECE in Zanzibar, which is provided through government pre-schools and classes, private and community pre-schools, and Tutu centres. It is estimated that up to a half of Zanzibar’s children have access to some kind of pre-schooling, and enrolment as recorded by EMIS has increased from around 30,000 in 2010 to 42,000 in 2015. However, income remains a barrier to pre-primary education, and many children enrol over-age. Availability of affordable, high-quality centres close to children’s homes, and community mobilisation, will be important in increasing enrolment in pre-school.

In accordance with the Zanzibar Education Policy, the Government is now pursuing full enrolment in pre-primary as part of compulsory basic education. The increase in access to pre-school is largely intended to be met by opening pre-primary classes in existing government primary schools. In addition, the RISE programme has been extended with a number of new Tutu centres opening, although this is not meant to be a long-term solution.

There are a number of challenges which come with the expansion of pre-primary: finding enough classrooms, finding teachers, training teachers, teaching and learning materials are some of the immediate issues which the Government has started to address. There are also questions which will take more time to answer. Will government schools crowd out private and community schools? Will the Government close Tutu centres, and what will happen to the mentors? How will the MoEVT ensure that the increase in salary bills due to increasing government pre-primary teachers
does not squeeze out other education spending? It would be beneficial to develop future scenarios and strategies to manage them, with implementation plans, in order for the Ministry and other stakeholders to work together towards a common goal.

There are already efforts to increase the training opportunities for teachers in pre-primary schools, to qualify them in early childhood methods. It will be important to understand how far these existing schemes will cover the teacher needs – both the current cohort of teachers and new teachers required as pre-primary continues to expand. Continued cooperation between these schemes, such as MECP, ECACP, and SUZA, is very important for making complementary, high-quality training programmes and minimising duplication of efforts. In addition, it may be efficient to use resources developed for the ECACP and MECP programmes again for other programmes, rather than developing new ones.
10  Tertiary education

Box 20: Key findings on tertiary education

- With three universities, three teachers’ colleges and six other government colleges offering tertiary courses, Zanzibar's participation rates are well above the African average.
- The absorption of some of the other government institutions into SUZA should help quality. However, caution is needed to ensure some continue to offer non-degree courses that serve the broader world of work.
- The exam performance of secondary school leavers and the consequent small pool available for entry to universities is a cause for concern.
- An additional concern is employment rates for graduates of these tertiary institutions. Tracer studies are not available.
- The establishment of the ZHELB, which provides loans, is a significant benefit to some Zanzibar families. Degrees are targeted for loans based on national priorities. Given the poor repayment record elsewhere in Africa long-term calculations of returns are needed to determine likely future finance.
- Higher education currently takes about 17% of MoEVT expenditure and this will rise as SUZA absorbs other government training institutions.
- Unit costs per graduate for SUZA are relatively high. As the institution enters a more stable growth phase these unit costs are likely to reduce.

10.1 Numbers and participations rates in tertiary education by Zanzibari students

Tertiary education in Zanzibar (referring to all post-secondary education, including but not confined to university education) is diversified and growing. In 2014, there were approximately 9,300 students enrolled in tertiary institutions and studying in Zanzibar itself. Of those for whom precise numbers are available, 60% were female. In addition, a further approximately 1,600 were studying on courses on the Tanzanian mainland or abroad.

The numbers are made up as follows. First are the traditional universities, one public, SUZA, and two private, Zanzibar University (ZU) and SUMAIt. Over the past six years these three universities have more than doubled enrolment and had approximately 6,665 students enrolled in 2014. Second is the KIST, which provides post-secondary education in a range of engineering courses at technician level and had 282 students enrolled in 2014. Third is a group of institutions that were under the auspices of different ministries: Kizimbani Agricultural Training Institute, the College of Health Sciences (CHS), the Zanzibar Institute of Financial Administration (ZIFA), the Zanzibar Institute of Tourism Development (ZToD) and the Institute of Public Administration (IPA). Each of these offers certificate- and post-secondary diploma-level courses, and the ZIFA offers four degrees. While precise numbers are difficult to ascertain, our estimate is that at least 1,600 students are studying on post-secondary courses in these institutions. Fourth, there are three TTCs, each taking in post-secondary students, one, Mazizini Islamic College, on Unguja, and two on Pemba, BW Mkapa and Pemba Islamic College, each offering diploma and certificate courses to 794 student teachers.

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38 Calculations based on National Manpower Survey 2013, Expanding Training Program SUZA 2014 and discussions with Zanzibari colleagues.
Available numbers are provided in the table below.

Table 30: Enrolment in tertiary education institutions within Zanzibar

<table>
<thead>
<tr>
<th>Colleges</th>
<th>Type</th>
<th>Enrolment (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>1. ZIFA</td>
<td>Public</td>
<td>The MoEVT has no enrolment information for these institutions. Our enrolment estimate for tertiary-level courses is approximately 1,600 students.</td>
</tr>
<tr>
<td>2. ZIToD</td>
<td>Public</td>
<td>58</td>
</tr>
<tr>
<td>3. CHS</td>
<td>Public</td>
<td>69</td>
</tr>
<tr>
<td>4. Kizimbani Agricultural Training Institute</td>
<td>Public</td>
<td>46</td>
</tr>
<tr>
<td>5. IPA</td>
<td>Public</td>
<td>202</td>
</tr>
<tr>
<td>6. BW Mkapa TTC</td>
<td>Public</td>
<td>834</td>
</tr>
<tr>
<td>7. Mazizini Islamic College (TTC)</td>
<td>Public</td>
<td>970</td>
</tr>
<tr>
<td>8. Pemba Islamic College (TTC)</td>
<td>Public</td>
<td>707</td>
</tr>
</tbody>
</table>


Finally, in addition to the students in these four groups of tertiary institutions, another 863 Zanzibaris are studying with student loan support on the mainland or at the Open University of Tanzania courses in Zanzibar or abroad, mainly in China and the Sudan, and an unknown number are using their own resources or on scholarships – perhaps 1,600 overall. It can be estimated therefore that Zanzibar had approximately 11,000 students studying on tertiary-level courses in 2014. This represents almost 800 students for every 100,000 people in Zanzibar and this can be compared to the cross-Africa average for low-income countries of 330 per 100,000 people and the average in the United Republic of Tanzania of 321 (UNESCO Institute of Statistics). These estimates must be treated cautiously given that almost all the institutions identified offer certificate-level courses as well as diploma courses and only five offer degree-level courses. Nonetheless, Zanzibar’s tertiary education provision is diversified and growing.

10.2 Current efforts to rationalise publicly supported tertiary education

The RGoZ commissioned a study to examine the different government institutions offering tertiary education and make recommendations. The study concluded that the three TTCs should be absorbed into SUZA and BW Mkapa was absorbed in 2015. Work is ongoing to determine when the other two TTCs will be absorbed. The study further recommended that institutions under other ministries should also be absorbed into SUZA. The RGoZ has agreed and this is being carried out in two phases with phase one commencing almost immediately: it is expected that ZIFA, CHS and ZIToD will become part of SUZA during the 2016/17 academic year.

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39 This estimate is based on discussions with Zanzibari colleagues and is very approximate.
The table below shows the information available to us on other government training institutions in Zanzibar.

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Reg’d and body</th>
<th>Courses offered</th>
<th>Awarding body</th>
<th>Numbers studying in 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZIFA</td>
<td>Yes, registered with NACTE</td>
<td>Four degrees and three diplomas</td>
<td>Fully accredited by NACTE and becoming part of SUZA</td>
<td>1,261</td>
</tr>
<tr>
<td>CHS</td>
<td>Not registered with any Regulatory body, Established by Parliament as autonomous body</td>
<td>Seven areas including clinical medicine, dentistry and nursing but it is not clear at which levels the courses are offered</td>
<td>Direct CHS awards. SUZA is already offering a Doctor of Medicine degree in 2015</td>
<td>287</td>
</tr>
<tr>
<td>ZIToD</td>
<td>N/A</td>
<td>Two diplomas, 10 certificates and short courses</td>
<td>ZIToD awards ratified by Confederation of Tourism and Hospitality UK. Becoming part of SUZA</td>
<td>439</td>
</tr>
<tr>
<td>KIST</td>
<td>Yes, NACTE</td>
<td>Diplomas in a range of engineering disciplines (see Chapter 10)</td>
<td>KIST awards. Will not be part of SUZA</td>
<td>282</td>
</tr>
<tr>
<td>Kizimbani Agricultural Training Institute</td>
<td>Yes NACTE</td>
<td>One diploma</td>
<td>Direct Kizimbani Agriculture Training Institute award not accredited by NACTE</td>
<td>98</td>
</tr>
<tr>
<td>IPA Zanzibar</td>
<td>Yes, NACTE</td>
<td>Three diplomas and a certificate</td>
<td>Direct IPA award. Accredited by NACTE</td>
<td>2,173</td>
</tr>
</tbody>
</table>

Sources: Tanzania Commission for Universities (TCU), NACTE, Expanding Training Program SUZA 2014 and institutional websites. Note: Apart from KIST, these numbers are taken from the National Manpower Survey 2013 and numbers include students on certificate as well as diploma and degree courses.

It is unclear how SUZA will manage the transition of these institutions or how many of their different courses it will continue to offer. Some suggestions are made in the study Expanding Training Program SUZA, 2014. Clearly, a SUZA award will enhance the quality of the courses offered; however, the study is concerned about the quality of staff and facilities in these institutions. On the other hand, institutions such as ZoITD and ZIFA should continue to be supported to deliver short and certificate-level courses that serve their parent industry.

10.3 ZHELB

The Higher Education Students' Loans Board (HESLB) was established by the Government of the United Republic of Tanzania in 2004 and became operational in July 2005. This provides loans for all eligible students across the United Republic of Tanzania. However, ZHELB was established by Act No. 3 of 2011 and became operational in the same year; it serves eligible students from Zanzibar wishing to study anywhere in Tanzania or abroad.

During 2014/15, ZHELB provided 3,068 student loans to Zanzibari students studying in Zanzibar, on the mainland and abroad. Table 32 shows this.
Table 32: Degree courses offered prioritised by ZHELB and the total number of students receiving loans by institution

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree courses offered through TCU</th>
<th>Degrees in prioritised areas</th>
<th>Students with loans from ZHELB 2014/15¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZU</td>
<td>20</td>
<td>14</td>
<td>1,035</td>
</tr>
<tr>
<td>SUZA</td>
<td>12</td>
<td>10</td>
<td>426</td>
</tr>
<tr>
<td>ZIFA</td>
<td>4</td>
<td>4</td>
<td>239</td>
</tr>
<tr>
<td>SUMAIT</td>
<td>26</td>
<td>23</td>
<td>505</td>
</tr>
<tr>
<td>Other Institutions on the mainland and abroad</td>
<td>n/a</td>
<td>n/a</td>
<td>863</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>51</td>
<td>3,068</td>
</tr>
</tbody>
</table>

Sources: Budget 2015/16, TCU Undergraduate Student Admission Guidebook 2015 and ZHELB communication. Note: These numbers come from communication with ZHELB.

The table also provides information on the number of degrees offered through the TCU by Zanzibari higher education institutions as well as those considered to be in priority areas by the Zanzibar Planning Commission and ZHELB.

The objective of the fund is to provide loans to eligible students who join accredited higher learning institutions. The number of loan applicants annually has grown from 1,800 in 2011 to 4,500 in 2014 but the fund can only support about one-third of these new applicants (in addition to those continuing their studies). Accordingly, prioritised fields of study are identified by the Zanzibar Planning Commission and loans are provided for qualified applicants for these fields. Priorities are determined to ensure new graduates are equipped with the skills, knowledge and expertise to be productively employed. ZHELB reports that these priorities seek to match the supply of graduates with the demand for graduates. ZHELB also reports that priority areas are divided into groups and these are given different weights according to need.

More details on the financing of ZHELB are given below in section 10.810.8.1.

10.4 Entry to universities

The direct entry qualification for undergraduate courses in SUZA are: (a) five passes, three of which should be at credit level at ordinary Certificate of Secondary Education National Examination or equivalent, and (b) two principal passes at Advanced Certificate of Secondary Education National Examination or its equivalent in appropriate subjects at the same sitting with total points of not below 4.5 for arts student and 2.0 for science students; or (c) two principal passes in appropriate subjects not at the same sitting provided they are both of grade C or higher.

However, over the three years 2012–14, of those taking the Form 4 exam fewer than 20% passed with sufficiently high grades to proceed to Forms 5 and 6. Further, of those who proceed to Form 5 only 20% get a Division II pass in the Form 6 examination. In 2014 approximately 1,000 Zanzibari students sat for the A-level exam and only about 200 qualified to be admitted to SUZA’s range of degree courses; others join a variety of university degree courses within Tanzania and abroad. See Chapter 5 for more details on examination pass rates.

This is a major problem. When the numbers of those passing mathematics and science is considered it is surprising that SUZA was able to attract over 400 qualified candidates in 2014 (Annex J provides numbers studying in SUZA in 2014/15). The entry requirements for ZU and SUMAIT degrees are the same as those in SUZA for science courses but SUMAIT required only
2.0 total points for arts in the past (from 2015 it requires 4.0 points). As has been stated SUZA requires 4.5 points.

10.4.1 Alternative entry requirements

One possible answer to the question how SUZA can attract over 400 qualified candidates lies in alternative entry requirements. These are 'in addition (a) at least three credit level passes in relevant subjects, one of which may be English language or Mathematics; or (b) relevant accredited Diploma or Certificate of not less than second class’.

Applicants for bachelors of science, computer science and education shall hold at least three O-level credit passes in relevant science subjects and a relevant accredited diploma or certificate of not less than second class.

These alternative entry modalities are taken up by a large number of entrants to SUZA and SUMAIT but we have not been able to determine the precise numbers.

In addition to admitting students with at least second class diplomas, SUMAIT also offers a PUC for those with points below 2.0. Applicants who successfully complete and pass the final exam of the PUC are admitted to the undergraduate degree within the relevant department. Of the 165 students who started the PUC course in 2013, 30 were admitted to degree programmes; in 2014 35 of the 149 PUC students were admitted to degree programmes.

10.5 QA

Each of the three universities in Zanzibar is registered by the TCU and recognised as a 'fully fledged university'. Recognition involves a QA process carried out under the auspices of the TCU and involving, inter alia, an assessment of staff qualifications, academic and support, staff to student ratios, and facilities, including library holdings, laboratories and IT equipment. This QA process is intended to be ongoing and the TCU has each university charge a QA fee to enrolled students for this purpose:

Pursuant to section 5(1)(b) of the Universities Act, Cap. 346, the Commission is required to audit, on regular basis, QA mechanisms of Universities which include; carry out evaluation, assessment and monitoring of universities on a continuous basis and make guidelines for Quality Assurance and other related matters for the purposes of monitoring and regulating general management and performance of Universities.

As Table 31 earlier in this chapter shows, four of the other tertiary institutions are registered with NACTE and this also requires a QA process. We were not able to determine the extent and depth of this.

10.6 Links to employment and the world of work

Until recently most of SUZA's and SUMAIT's courses were geared to serve the education sector and many of their graduates are likely to have gone on to be employed by the MoEVT and private schools. This is not the case for ZU, which offered business and computing degrees. The Planning Commission carries out manpower surveys every three years and found that the majority of graduates are seeking employment (though as has been discussed earlier many studying education degrees enter with diplomas and were employed). The manpower study surveyed over 16,000 employees in public and private sector employment and found that 17% had degrees or
above and 28% had diplomas. The study found that there were very few posts available for graduates and many emigrate to the mainland or further afield. It concluded:

This situation is wastage of national financial and human resources in consideration to the national endeavour of increasing the quantity and improving the efficiency in the manpower planning. The scene is not conducive and promising to a developing country like Zanzibar which requires capable and professional human capital.

However, it is not possible to determine whether recent graduates from any of the universities are gaining employment or where without tracer studies of graduates. These are not available. Tracer studies of the current crop of graduates from universities and tertiary institutions would provide valuable information for the Planning Commission as they would help prioritise areas for student loans and for the institutions as they plan new courses and determine the content of existing courses.

10.7 Student fees

Students pay tuition fees for higher education courses. SUMAIT charges TZS 1,600,000 for its BA with Education degrees (apart from History and Geography, where the fee is TZS 1,800,000). ZU charges TZS 1,815,000 for all degree courses, including its new education courses. SUZA’s fees for degree programmes depend on whether the student receives support from a student loan or not: if there is some loan support, the fee is marginally higher. Student loans are not available for diploma and certificate courses. The annual fee for certificates and diplomas ranges from TZS 540,000 to TZS 1.3 million, for degrees the range is TZS 1.5 million (BA Ed) to TZS 3.5 million (Medicine). The annual cost of the tuition fee for courses offered at SUZA are shown in Figure 60.

**Figure 60: Student tuition fees at SUZA**

![Figure 60: Student tuition fees at SUZA](image)

Source: SUZA Finance Department.

ZHELB grants living allowance loans of up to TZS 800,000 per year for meals and accommodation for students on degree programmes in Zanzibar. This cap is increased to TZS 1.4 million per year for those studying in mainland Tanzania.
10.8 Government contributions for tertiary education

Tertiary education in Zanzibar receives substantial funding from the Government. Table 33 shows the level of actual recurrent expenditure in 2014/15 on the departments and institutions focusing on tertiary education under the MoEVT. The total recurrent spending from the RGoZ Exchequer funds is TZS 13.6 billion. SUZA, KIST, ZHELB and the three TTCs (of which BW Mkapa has now transferred to SUZA) each received subvention for other charges, and SUZA, KIST and ZHELB also received subvention for salaries. The Departments of Teacher Education in Unguja and Pemba pay the personal emoluments for the three TTCs, which until now have been part of the MoEVT staff salary scale. SUZA's salary expenditure of almost TZS 5 billion accounts for the majority of salary spending in tertiary education. Overall, tertiary education takes 11% of the ministry's salary expenditure. The most notable point, however, is that tertiary education accounts for 56% of the ministry's non-salary recurrent expenditure (TZS 6 billion out of TZS 10.8 billion) in 2014/15. This is almost wholly owing to the spending on student loans, which at TZS 5.8 billion is over half of all non-salary recurrent expenditure.

Table 33: RGoZ recurrent expenditure on tertiary education, 2014/15 (TZS millions)

<table>
<thead>
<tr>
<th>Department/institution</th>
<th>Salary</th>
<th>Non-salary recurrent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher education department(^1) Unguja</td>
<td>885</td>
<td>61</td>
<td>945</td>
</tr>
<tr>
<td>Teacher education coordination(^1) Pemba</td>
<td>708</td>
<td>7</td>
<td>715</td>
</tr>
<tr>
<td>Mazizini Islamic College Unguja</td>
<td>0.0</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Pemba Islamic College</td>
<td>0.0</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>BW Mkapa campus of SUZA(^4)</td>
<td>0.0</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>SUZA</td>
<td>4,897</td>
<td>65</td>
<td>4,962</td>
</tr>
<tr>
<td>KIST</td>
<td>847</td>
<td>27</td>
<td>874</td>
</tr>
<tr>
<td>ZHELB(^5)</td>
<td>171</td>
<td>5,819</td>
<td>5,989</td>
</tr>
<tr>
<td>Total Tertiary Education</td>
<td>7,508</td>
<td>6,061</td>
<td>13,569</td>
</tr>
<tr>
<td>Total MoEVT recurrent spending</td>
<td>69,676</td>
<td>10,768</td>
<td>80,444</td>
</tr>
<tr>
<td>Tertiary education as % of total</td>
<td>11%</td>
<td>56%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: MoEVT Accountant/IFMIS. Notes: (1) Only spending under the MoEVT has been included here. However, there are tertiary education institutions offering courses in Agriculture, Finance, Health and Tourism under other ministries, incurring a further cost to the Government. In future years these will be included in SUZA's budget. (2) Non-salary recurrent includes allowances, social benefits, supplies and consumable goods, and capital expenditure. (3) The teacher education department budgets will also cover in-service training, which could be considered pre-primary, primary or secondary education expenditure. (4) During the period in question this was BW Mkapa TTC. (5) ZHELB expenditure is an immediate cost to government, while loans are expected to be repaid in future years.

There are three points to note. First, these costs do not include the costs of those tertiary institutions being financed by other ministries. When these are fully transferred, costs will rise as a share of total MoEVT expenditure on education (though not necessarily as a share of total government expenditure on education). Second, across Sub-Saharan Africa the average expenditure on tertiary education is 20% of total education spending (World Bank, 2010, data from 2006). Tertiary education's share of MoEVT spending in Zanzibar is likely to approach this when SUZA absorbs the non-MoEVT colleges. Third, future levels of expenditure on student loans are likely to be affected by the repayment rates from supported students, discussed further in the next section.
10.8.1 Financing student loans

Almost all student loans schemes are subsidised by the Government either absorbing the cost of part repayment or subsidising interest rates for particular courses. A recent study concluded: ‘In general the record of student loan recovery across Sub-Saharan Africa is exceedingly poor’ (World Bank, 2010).

The sustainability of financing student loans is discussed in more detail in Annex J. The loan repayments are intended eventually to create a revolving fund. Although applicants are judged on the likelihood of their ability to repay, in fact many graduates do find it hard to repay (even with no interest included), and ZHELB is not always able to trace graduates and demand repayment. Three different scenarios of student loan repayments are simulated and examined in Annex J. Based on simplifying assumptions, even if the loans were repaid in full, inflation means that the repayment value is less than 70% of what was initially lent. This could fund only around 70% of the number of new students that were originally funded. With less optimistic assumptions about repayment rates, ZHELB will recover even less of the loans it originally issued. It will be important for ZHELB to develop these scenarios further and discuss these with the Government to ensure sustainability of finance for student loans over the medium-term.

Given that the annual costs of student loans schemes are almost always likely to exceed the income gained from recovery of loans, the social benefits of this investment warrant further research and discussion. Included in the likely benefits are the returns to the economy from increased labour force skills and the social returns from educated professionals in areas such as health and education. However, it is also the case that some graduates emigrate to work elsewhere, particularly on the Tanzania mainland, which reduces their contribution to the Zanzibar economy. It would be useful to conduct a full cost–benefit analysis to inform RGoZ’s decision on the optimal level of the subsidy. The analysis should examine not only the loan scheme as currently designed but also explore different permutations of the scheme, varying the repayment terms, loan amounts, number of students and course and eligibility criteria.

10.9 SUZA

SUZA is the dominant and pre-eminent public education institution on the island. Established in 2001 on the grounds of and incorporating the Kiswahili Foreign Language Institute, it is now 15 years old. Until 2011 it had only one school, the School of Education Arts and Sciences, and two institutes – the Institute of Kiswahili and Foreign Languages, and the Institute of Continuing Education – with about 1,000 full-time students. Most of its graduates were teachers: only one course, in Computer Science, was not aimed at producing teachers. In addition to its inaugural site, Vuga, in downtown Zanzibar City, SUZA was given the Nkrumah College of Education site in Beit-el-Ras in 2006 and took on some of its secondary teacher programmes. In 2011 with a loan from BADEA (the Arab Bank for Economic Development in Africa), its Tunguu campus was developed about 20 kilometres from Zanzibar City.

Since 2011, SUZA has more than doubled its student population and is now organised in five schools: Education, Natural and Social Sciences, Kiswahili and Foreign Languages, Medical and Health Sciences, and Continuing and Professional Education. Currently it offers 29 programmes at different levels, including one PhD and four Masters programmes, as well as 12 degree, 10 diploma and two certificate programmes. It is planned that each of the new institutes being absorbed by SUZA will become a school of the university; the CHS has become the School of Medical and Health Sciences, the ZIFA will anchor the planned School of Business Studies, while the ZIToD will become part of the planned School of Tourism and Hospitality Management. It is
anticipated that student numbers will continue to grow, reaching 3,500 in the next year, and could reach 10,000 by 2020 (personal communication, Vice Chancellor SUZA).

Table 35 shows the number of graduates from SUZA for four years from 2010/11. Two trends emerge. First, numbers are increasing and are likely to continue to increase. Second, the number of graduates from courses in disciplines other than education is increasing.

Table 34: SUZA graduates 2010/11 to 2014/15

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Education</td>
</tr>
<tr>
<td>2010/11</td>
<td>290</td>
</tr>
<tr>
<td>2011/12</td>
<td>411</td>
</tr>
<tr>
<td>2012/13</td>
<td>587</td>
</tr>
<tr>
<td>2013/14</td>
<td>399</td>
</tr>
</tbody>
</table>

Source: SUZA.

10.9.1 Infrastructure

While higher education is a Union matter, it appears that SUZA has not received any money from the Union Government for infrastructure. The original campus was owned by the Kiswahili Language Institute and the campus in Beit-el-Ras was the Nkrumah teachers college. The new campus in Tunguu was built using a loan from BADEA (the Arab Bank for Economic Development in Africa) and the four buildings on the site do not include a cafeteria or student centre.

10.9.2 SUZA income and expenditure

SUZA's total income has increased six-fold in nominal terms since 2005/6, from TZS 1.5 billion in 2005/6 to TZS 12.2 billion in 2014/15, with all sources of income increasing in that time (Figure 61). Government subvention is the largest income source, which at TZS 4.97 billion in 2014/15, made up 41% of SUZA's total income (Figure 62). Around 32% of income is from student fees, from both undergraduate and postgraduate courses, Kiswahili courses for foreigners, and SCOPE (School of Continuing and Professional Education) courses. SUZA receives income from development partners and other supporters; within this category comes income from international donors such as the World Bank and UNICEF, as well as other public bodies from Zanzibar and mainland Tanzania (see Chapter 3 for a full breakdown of SUZA income). SUZA makes its own income from other activities, and although these amounts are small they are important for sustainability. These incomes include fees for application forms, for late registration, for renting out facilities, and some consultancy projects.
Student fees make up an important component of SUZA's income, and in 2014/15 undergraduate and postgraduate courses brought in TZS 3.4 billion. However, some of this amount is paid directly to SUZA by the student loan boards. The number of SUZA’s students supported by loans from the loan boards has been increasing over recent years (Figure 63). In 2005/6, 278 students were receiving sponsorship from the HESLB in the United Republic of Tanzania. This number increased to a peak of 883 in 2010/11. From 2011/12 SUZA started receiving students with sponsorship from ZHELB, and by 2014/15 there were 306 of these students. The total income to the university from the two loans boards has risen from TZS 180 million in 2005/6 to TZS 1.1 billion in 2014/15; student numbers are up from 278 to 1,062. Income from the loans increased most steeply between 2013/14 and 2014/15. Up to then, the average income per student from the loans boards was generally between TZS 400,000 and TZS 600,000. However, in 2014/15, the average student loan income was TZS 685,000 from ZHELB and TZS 1.2 million from HESLB. SUZA finance staff noted
two reasons for the jump in income, though they do not fully explain the increase in average loan. First, the university increased the number of programmes offered from 14 to 23 in this time, and of the nine new programmes, seven were eligible for loans – so increasing enrolment of students with loans. In addition, tuition fees increased by 5% between 2013/14 and 2014/15.

**Figure 63: Students at SUZA with loan sponsorship, and loan income**

Source: SUZA Finance Department.

**10.9.3 Expenditure – SUZA**

In 2014/15 SUZA spent a total of TZS 10.0 billion, and the breakdown of this spending by general category is shown in Figure 64. Salaries and personnel accounted for 55% or TZS 5.5 billion of all costs, of which TZS 5.1 billion went on wages and salaries in cash (the rest being in-kind contributions, human resource welfare, social contributions and social benefits). Administration-type running and overhead costs took up 18% of total expenditure (for example, communications, office supplies, fixed assets and maintenance and travelling expenses). The cost of consultancy expenses and donor-funded expenses came to TZS 1.4 billion, 14% of the total. Around 13% of spending was on departments, which might be described as closer to the delivery of courses and welfare for students, including capacity building for staff, which contributes to the quality of tuition.
10.9.4 Unit costs at SUZA

There are a number of methods for calculating unit costs, and although the ideal would be to work up a unit cost per student by building costs from the bottom up, this would be different across courses and require a number of detailed data and assumptions. An alternative is to calculate an average cost spent per student. It should be noted, however, that some degree courses, including medicine and applied sciences, are much more expensive than taught courses in arts subjects, while graduate degree costs are very different from undergraduate costs.

Table 35 shows the number of students enrolled in SUZA in 2014/15 on PhDs, Masters, Bachelors, diplomas and certificate programmes. With 2,705 students enrolled, and a total expenditure by SUZA of TZS 10 billion, this gives an average expenditure per student of TZS 3.7 million. However, this is an overestimate for a number of reasons. First, there is some spending on consultancy assignments and donor-funded activities. If this is removed, then the unit cost per student is TZS 3.2 million. This is still an overestimate though, as this spending also goes towards students on short courses (SCOPE and Kiswahili for foreigners), and overhead costs which should not be attributed to the operational cost of teaching a student (e.g. fixed assets). However, it could be said that this gives a useful indication of the spending per student, given all the overhead factors are required to keep a university running, and the SCOPE and Kiswahili for foreigners courses are low in comparison with the total.
Table 35: SUZA enrolment and unit costs, 2014/15

<table>
<thead>
<tr>
<th>Enrolment and unit costs, 2014/15</th>
<th>2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate students: Masters and PhD</td>
<td>82</td>
</tr>
<tr>
<td>Bachelors, diploma and certificates:</td>
<td></td>
</tr>
<tr>
<td><em>Nkrumah campus</em></td>
<td>819</td>
</tr>
<tr>
<td><em>Tunguu campus</em></td>
<td>1480</td>
</tr>
<tr>
<td><em>Vuga campus</em></td>
<td>324</td>
</tr>
<tr>
<td>Total enrolment</td>
<td>2,705</td>
</tr>
<tr>
<td>Expenditure (TZS millions)</td>
<td>10,037</td>
</tr>
<tr>
<td>Unit cost (TZS)</td>
<td>3,710,463</td>
</tr>
<tr>
<td>Expenditure excluding consultancy and donor projects (TZS millions)</td>
<td>8,590</td>
</tr>
<tr>
<td>Unit cost (TZS)</td>
<td>3,175,767</td>
</tr>
<tr>
<td>Unit cost (USD)</td>
<td>1,469</td>
</tr>
</tbody>
</table>

Source: Author calculations.

The World Bank study referred to earlier found the average spending in 2010 to be USD 1,330 per student in low-income countries (USD 1,451 at current rates) and USD 2,000 across Sub-Saharan Africa (USD 2,182 at current rates). SUZA’s unit costs compare favourably to these (World Bank, 2010).

It is interesting to compare these costs with the current unit costs of BW Mkapa, provided in Annex J5. The estimates are TZS 605,813 per student teacher. These unit costs are likely to rise now that SUZA has taken over BW Mkapa.

Another way to look at the unit costs is in terms of the number of students graduating. This is important because if only a proportion of students who enrolled eventually graduate, then the expenditure per graduate gives an indication of the efficient use of resources. Table 36 shows the number of graduates each year from 2010/11 to 2013/14 (Bachelors, diplomas and certificates only). The table uses the total income to SUZA (a proxy for expenditure) to calculate the average income per graduate, which ranges from TZS 15.7 million to TZS 10.5 million. The table also shows the cost to the Government per graduate.

Table 36: SUZA graduates and income: unit costs per graduate

<table>
<thead>
<tr>
<th>Graduates</th>
<th>Total income (TZS millions)</th>
<th>Income from government (TZS millions)</th>
<th>Income per graduate (TZS)</th>
<th>Cost to government per graduate (TZS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/11</td>
<td>320</td>
<td>5,011</td>
<td>2,852</td>
<td>15,658,363</td>
</tr>
<tr>
<td>2011/12</td>
<td>498</td>
<td>6,063</td>
<td>3,366</td>
<td>12,173,891</td>
</tr>
<tr>
<td>2012/13</td>
<td>777</td>
<td>7,245</td>
<td>3,646</td>
<td>9,324,369</td>
</tr>
<tr>
<td>2013/14</td>
<td>741</td>
<td>7,780</td>
<td>4,857</td>
<td>10,499,831</td>
</tr>
</tbody>
</table>

Source: Author calculations.

These unit costs again have limitations. First, they apply the full costs of SUZA to students in their final year of study, with no adjustment for potential differences in spending in students’ earlier years, or for increases in new entrants each year. Secondly, again this only relates to graduates on Bachelors, diplomas and certificates, when the cost of postgraduate and short course students should ideally be separated. Finally, SUZA is in a substantial growth phase and numbers enrolling
each year are much greater than numbers graduating in that year. This is likely to continue for some time to come. However, it can be expected that costs per graduate will get closer to costs per student enrolled as SUZA's growth stabilises.

### 10.10 Conclusions

There is a wide range of institutions offering tertiary courses in Zanzibar and participation rates are higher than the average across low-income countries.

The current rationalisation process with SUZA absorbing other Government tertiary institutions is likely to improve the quality of diploma and degree-level courses. It will be important that certificate and continuing education courses that serve industry continue to be supported.

The number of secondary school students qualifying to enter universities gives cause for concern, particularly numbers qualifying for science and technology courses. While this needs to be dealt with at the level of secondary school, universities may have a role in supporting these efforts, perhaps through some pre-entry courses.

The establishment of ZHELB may increase opportunity for young people from low-income families to participate in higher education. However, their participation should be monitored. In addition, ZHELB should determine financing requirements in the medium-term using repayment scenarios based on experience elsewhere in Africa. A full cost–benefit analysis of the current loan scheme design and of other design options would be valuable.

As universities diversify provision from supporting the education sector, it will become even more important to monitor industrial demand and employment of graduates. Tracer studies of graduates should be carried out regularly and the results discussed by providers.
11 Adult literacy, alternative learning and continuing education

Box 21: Key findings on adult literacy, alternative learning and continuing education

**Adult literacy**
- Literacy rates increased from 71% to 80% over the decade to 2012 (census estimates), while at the same time the gender gap narrowed to four percentage points, down from 14 percentage points a decade earlier.
- Adult literacy classes are catering for about 6% of non-literate adults.
- Two-thirds of non-literate adults are female, and they are more likely to enrol in literacy classes than non-literate men.
- Adult literacy is an extremely resource-constrained service. Teachers are paid a meagre allowance, and most receive few teaching and learning materials.
- Retention in adult literacy classes is a problem – the number of Final Stage learners is equivalent on only one-quarter of First Stage learners.
- The majority of Final Stage learners report that they can read and write letters, but struggle with understanding large numbers. Most also report that they can carry out some essential life-relevant tasks that require literacy, such as reading a doctor’s prescription.

**Alternative learning programmes**
- School-based alternative learning classes for children who have never entered school cover roughly 7% of the target group. About two-thirds of students enrolled go on to join the formal system.
- The alternative learning programme providing pre-vocational skills for young people aged 15–22 years is catering for an important need, but coverage is exceedingly low and the service is only available in one institution in Rahaleo (Urban district). Many teachers at the centre do not have vocational or technical expertise, and many are underutilised.

**Continuing education**
- The continuing education programmes cover a diverse range of small services. Enrolment is dropping and coverage of the target populations is extremely limited.
- Learners pay contributions for all programmes, unlike adult literacy or alternative learning students.
- Basic data needed to manage services effectively are not readily available. Much is either missing or inconsistent between sources. There is no information readily available on pass rates or completion rates for continuing education learners (either the O-level and A-level second-chance programmes or the others). This is an important data gap.

**Overall subsector**
- Provision is fragmented, dominated by public providers, and difficult to manage with the existing weak management information system. The subsector needs a coherent strategy, informed by targeted pieces of research where information is unreliable and incomplete, so it can better utilise existing resources and attract additional funds.

11.1 Introduction and policy context

This chapter summarises the situation of services currently being provided under the MoEVT’s Department of Alternative Learning and Adult Education. After a brief overview of the policy context in this area, the chapter is split into the following five sections: structure of the subsector; needs and participation; resourcing mechanisms; quality and relevance; and conclusion.

This chapter draws heavily on two recent relevant reports: (i) the EFA assessment (MoEVT, 2014a, Chapter 4), which reviewed progress on adult learning and continuing education (ALCE) from 2001 to 2013; (ii) an MoEVT study on adult literacy (MoEVT 2014b), which is based on a survey of more than 3,000 respondents from all adult literacy centres across Zanzibar in 2013.
These rich sources were complemented with information from a small number of field visits and interviews with officials at central and local level about the delivery of ALCE services.

In this report, ‘alternative and continuing education’ is used as the overarching term for a group of services provided for learners outside the formal education system. Further explanation is given below.

11.1.1 Policy context

The policy on ALCE is well described in the EFA assessment (p. 84). It states that national documents which govern policy in this area ‘focus on ability to read, write and count, control over ones environment though improving economic status, health, changing attitudes, life styles, enhance life skills and accept and accommodate national changes’. Hence the subsector has a complex set of objectives which embody functional literacy but also broader economic, health and citizenship goals.\(^\text{40}\) There are few hard targets at the policy level for this subsector with the exception of the stated aim in MKUZA II (RGoZ, 2010) to increase the overall literacy rate to 90% by 2015.

Under the current education programme, ZEDP 2008/9–2015/6, the objectives for the ALCE subsector are:

- Promoting, strengthening and regulating adult education in collaboration with other partners.
- Diversifying and expanding (the) alternative education programme to provide basic education and pre-vocational opportunities to meet the needs of learners who are unable to benefit from formal schooling.
- Improving access to quality education and training for OOSC, young people and adults.

Some of the key implementation strategies are: communication and sensitisation of stakeholders; strengthening provision via partnerships with other stakeholders; and ensuring that an effective monitoring and evaluation system for ALCE is established.

11.2 The structure of the subsector

An overview of the ALCE subsector is shown in Table 37. The subsector is overseen by the MoEV’T’s Department of Adult Education and Alternative Learning, headed by a director. At local level, each district has a coordinator for adult education and alternative learning who is part of the MoEV’T’s district team.

There are two main types of service: (i) adult literacy; and (ii) alternative and continuing education. The scale of the different programmes varies enormously (see next section).

The adult literacy programme provides literacy classes for adults who have never attended school. These take place in available public buildings (termed ‘centres’) in all districts of Zanzibar.

The alternative and continuing education services are more diverse. There are four main programmes:

- Alternative learning;
- Ordinary-level and advanced-level second-chance classes;

\(^{40}\) UNESCO’s definition of functional literacy is: the ability to read, write, identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts.
• Pre-vocational skills; and
• Women’s programme.

These four distinct services taken together target: children who have never attended school; young people who have never attended or dropped out of school; adults who have completed primary education; adults who have completed Form 2 or above; and women graduates of the adult literacy programme. This represents a fairly comprehensive target group of educationally marginalised children, young people and adults.

The intended destination for most graduates of alternative and continuing education is either self-employment or formal employment, with the exception of the school-based alternative learning service. Under this programme, children who gain the skills and knowledge standards in the condensed basic curriculum are eligible to re-join formal primary schooling.

All the services set out in Table 37 are publically regulated with some form of public subsidy – either a financial payment or building space. There appears to be little known about any non-government providers of either adult literacy or alternative and continuing education services.
### Table 37: Structure of adult education and continuing education subsector

<table>
<thead>
<tr>
<th>Service type</th>
<th>Programme</th>
<th>Provider</th>
<th>Content</th>
<th>Eligibility</th>
<th>Target destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Literacy</td>
<td>Adult literacy classes</td>
<td>Public centres (all districts)</td>
<td>Kiswahili, mathematics and life-skills</td>
<td>Adults who never attended school</td>
<td>Another ALCE programme</td>
</tr>
<tr>
<td>Alternative and Continuing Education</td>
<td>Alternative learning</td>
<td>Public primary schools (all districts)</td>
<td>Condensed early-grade basic education</td>
<td>Children aged 9–14 years who never attended school</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rahaleo Alternative Learning Centre (Urban district)</td>
<td>Condensed early-grade basic education/Pre-vocational skills</td>
<td>Young people aged 15–22 years who are out-of-school (never enrolled or dropped out of primary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-level and A-level second-chance classes</td>
<td>Public secondary schools (all districts)</td>
<td>Preparation to re-sit Form 4 and Form 6 examinations</td>
<td>Young people or adults who have completed Form 2 (or O-Level); have passed Form 4 exam with 3 credits (A-Level)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law programme</td>
<td>Centres/UDSM</td>
<td>Certificate and diploma in law</td>
<td>Young people or adults who have completed Form 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-vocational skills</td>
<td>Public centres (some districts)</td>
<td>Domestic science; carpentry; tailoring</td>
<td>Adults who have completed primary education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's programme</td>
<td>Informal groups</td>
<td>Income generation skills</td>
<td>Adult women graduates from literacy programme</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Interviews with Director of Adult Education and Alternative Learning, Head of Rahaleo Alternative Learning Centre, and District Adult Literacy Coordinator (Urban). Notes: (1) The centres where adult literacy classes take place are not purpose-built; classes take place in available public buildings. (2) Life skills topics are covered through the Kiswahili and mathematics subjects. (3) Most alternative learning student re-enter the formal system at Standards 3, 4 or 5. (4) The pre-vocational skills offered include: electrical installation, housekeeping and laundry, domestic science, carpentry, tailoring and cookery. (5) The University of Dar es Salaam runs the course, but students study from centres in Zanzibar.
11.3 Needs and participation

11.3.1 Adult literacy

Looking at needs first, Table 38 shows the upward trend in the literacy rate for the population over the decade 2002 to 2012. Comparing results from the two latest censuses, the share of literate citizens has increased by nine percentage points, from 71% to 80%. At this rate of change, it will not be possible to meet the MKUZU II target of 90% literacy by 2015. The literacy estimates for the inter-census years (2005 and 2010) may not be as accurate as census data as they are from sample surveys, which may explain why some of the time trends are erratic.

Table 38: Trend in the population literacy rate (%) and number of non-literate adults by gender

<table>
<thead>
<tr>
<th></th>
<th>Literacy rate (%)</th>
<th>Number of non-literate adults (aged 20+)</th>
<th>Share of total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>79</td>
<td>82</td>
<td>88</td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>70</td>
<td>77</td>
</tr>
<tr>
<td>All</td>
<td>71</td>
<td>76</td>
<td>82</td>
</tr>
</tbody>
</table>

Sources: Census 2002; HBS 2004/5 and 2009/10 (the figures in the table are directly from the Adult Literacy Report, MoEVT 2014b, Table 1); Census 2012.

Over the decade, there has been a good deal of progress in narrowing gender gaps in literacy. In 2002 the literacy rate for males was 14 percentage points higher than for females, but by 2012 the gap was down to four percentage points. There are more females in the adult population (over 20 years) than males, and this combined with the gap in literacy rates, results in two-thirds of non-literate adults being women (Table 38).

There are about 73,000 non-literate women compared with about 37,000 non-literate men. Another piece of information which is potentially useful in targeting the adult literacy programme is that the age profile of non-literate women differs from that of non-literate men. The distribution of non-literate women in Figure 65 is skewed towards pre-50 year old women, peaking at around 45–49 years, while the distribution is much flatter for non-literate men with similar numbers in all age groups up to around 65 years.
Enrolment in adult literacy classes is just under 7,000 learners per year in 2014, and this figure has wavered between about 6,000 and 7,000 for the past six years (Figure 66). Compared with the needs of roughly 110,000 non-literate adults, these classes are catering for around 6% of the target group.

Women account for about 84% of enrolled learners in 2014, and this share has been fairly stable over time. Given the gender balance in non-literate adults, it is clear that non-literate women are more likely to participate in literacy classes than non-literate men.

District adult education officers organise literacy classes in response to community demand. One teacher is recruited for each class. Figure 66 (see line graph) illustrates that average class sizes are small and have been reasonably stable over the past six years at between 15 and 16 learners. Some 68% of teachers were female in 2014.
Within each literacy class, learners study at one of four stages of the literacy course. Stage 4 is the most advanced, and graduates receive a literacy certificate upon passing an examination (held once per year). Figure 67 depicts the balance of learners by Stage, at the start and end of a six-year period, and shows that the pattern has not changed much. As the Stage of learning increases, the share of learners falls sharply. Most learners are studying at Stages 1 or 2 (about 70%) with only 10% at Stage 4 in 2014 (687 learners).

**Figure 67: Distribution of adult literacy learners by stage of learning, 2009 and 2014**

![Figure 67: Distribution of adult literacy learners by stage of learning, 2009 and 2014](image)

Source: EMIS\Statistical Abstract 2014.

### 11.3.2 Alternative learning programmes

There are two types of alternative learning programme (Table 37). The scale of the school-based programme for children aged 9–14 who have never attended school has fallen by about 60% since 2009, and there are currently 725 students enrolled (Figure 68). An increasing share of girls is attending alternative education classes; more than two-thirds of enrolled students were female in 2015.

**Figure 68: Trends in enrolment in alternative learning classes and re-entrants to formal schooling by gender, 2009 to 2015**

![Figure 68: Trends in enrolment in alternative learning classes and re-entrants to formal schooling by gender, 2009 to 2015](image)

Source: Department of Alternative Learning and Adult Education (enrolment); EMIS\Statistical Abstract 2014\Budget tables 2015/16.
In terms of needs, the number of primary-aged children who are out of school and expected never to enter is about 10,000 (see Chapter 2) and so this indicates that alternative learning classes are covering around 7% of estimated needs. The programme is attracting an increasing number of girls, yet it is boys who are more likely to be out of school (see Chapter 2).

The other alternative learning programme targeted at young people aged 15 to 22 years who have dropped out of, or never attended, school operates from one large centre (Rahaleo Alternative Learning Centre) in Urban district. There are plans for additional centres. Over the past six years, enrolment in the centre has more than doubled from 137 to 280 students. Although estimates are not easy to make of the number of young people who qualify for this service, it is clear that this programme covers very few of them.

11.3.3 Continuing education

Obtaining consistent enrolment figures for continuing education programmes is challenging. This is partly because of the flexibility of some of the programmes where learners join and leave mid-year. According to figures from the Department of Alternative Learning and Adult Education in Table 39, the total number of learners on these programmes has fallen over the past few years from about 3,600 learners in 2012 to 3,000 in 2014.

<table>
<thead>
<tr>
<th>Continuing education programme</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-level second-chance classes</td>
<td>1,102</td>
<td>983</td>
<td>751</td>
<td>n/a</td>
</tr>
<tr>
<td>A-level second-chance classes</td>
<td>223</td>
<td>737</td>
<td>388</td>
<td>192</td>
</tr>
<tr>
<td>Law programme</td>
<td>64</td>
<td>82</td>
<td>140</td>
<td>24</td>
</tr>
<tr>
<td>Pre-vocational skills</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Women’s programme</td>
<td>1,120</td>
<td>757</td>
<td>1,195</td>
<td>2,097</td>
</tr>
<tr>
<td>Total</td>
<td>3,576</td>
<td>3,514</td>
<td>3,032</td>
<td>2,434</td>
</tr>
</tbody>
</table>

Source: Department of Alternative Learning and Adult EFA figures (hard copy) except for 2012 A-Level and Women’s programme enrolment, which come from EFA assessment, p. 94. Note: (1) The total figures were recorded separately from their components. The 2015 figure may be underestimated because of the missing O-level data. (2) n/a means ‘not available’.

Demand for O-level and A-level second-chance classes probably comes, at least in part, from students who have taken but failed the Form 4 and Form 6 examinations. The number of candidates who failed the Form 4 examination was about 5,000 in 2014, but this figure is erratic year-to-year – it was as low as 1,600 in 2009. Students failing the A-level examination numbered only 52 in 2013/14, but in the four years before that it was between 360 and 470 candidates per year (EMIS\Statistical Abstract 2014). This suggests that O-level second-chance classes are only covering a fraction of needs, while it is difficult to judge A-level coverage due to limited enrolment figures.

Data on enrolment in pre-vocational programmes in Table 39 is missing, but, at most, they cover a few thousand learners – an extremely small share of the thousands of Zanzibaris eligible for these programmes.
11.4  Resourcing modalities

11.4.1  Adult literacy

Learners do not pay fees to attend classes, and the service is supposed to be publically financed. Adult literacy teachers receive a small allowance from the MoEV of TZS 30,000 per month, but there is little or no other direct public funding for adult literacy centres. The adult literacy survey (pp. 36–37) found that a minority of teachers interviewed had received additional support from the Department. About one-quarter reported that they had received a lot of teaching and learning materials, and some said they were given transport (13%) or a performance incentive (15%). The MoEV is supposed to provide exercise books, textbooks, pencils, a chalkboard and chalk to classes, as well as assessment materials, but if the case study described in Box 22 is typical (which it may not be), then at best a few textbooks are provided and nothing else, while the learners provide exercise books and pencils. Even copies of the annual standardised literacy examination prepared by the Department are not available for all learners— in Urban district this year only one paper copy was delivered per class.

District adult education coordinators' salaries are paid by the MoEV, and the Department reports that it provides 14 litres of fuel each month to coordinators to fuel their scooters, although this may not always happen. At least some of the time, coordinators have to fill their scooters using their own funds. It is not clear how widespread this problem is. Looking at the adult literacy service overall, it seems fair to conclude that it is extremely resource-constrained.

Box 22:  Case study of adult literacy class, Urban district

This adult literacy class is situated in an urban area close to town. The class usually takes place in a madrasa, but the space was occupied and instead the class was held in a private home. The room was small and dark. The class has 20 female students enrolled, of whom 14 were present. Classes are held three times per week for two hours each.

The teacher is a Form 3 graduate who has been teaching this adult class for two years. She has had two days of training. The class contains learners from Stages 1 to 3, and they all learn together in the same space. The teacher has two student textbooks (for Stages 1 and 2) and writes material on to the portable chalk board.

Learners stated that they were taking the class so they could learn to read, write and count. Some explained that this would make them safer and they would be able to read signs and to write letters. Some learners said that they dreamed of getting a job. One previous male learner had managed to get a job in a hotel as a watchman after graduating from the class.

The main challenges mentioned by the teacher, students and district coordinator are very similar: (i) shortages of textbooks, additional reading materials for practice, exercise books, assessment materials and reading glasses for learners with poor sight; and (ii) physical space to hold classes – they do not have their own space so have to fit in with activities of owners of buildings.

Source: Authors.

11.4.2  Alternative learning programmes

For the school-based programme, classes are delivered by public primary teachers in public primary schools. There is no readily available information on whether the Department provides any specific resources or additional payments for teachers who conduct this programme.

The Rahaleo Alternative Learning Centre is a large building in Urban district that opened in 2006. The Alternative Learning and Skills Development (ALSD) I project, funded via the AfDB, constructed the building. The institution has 39 staff (including 21 teachers) on the Government payroll. It also employs three temporary teachers. Operational expenses are funded via income generation activities, as the building has ample space which can be hired for different purposes.
The ALSD II project has an office in the building and contributes to utility bills. Partly because of the proximity of the project, visits from the Department of alternative learning and adult education officers are frequent. Other material resources arrive in limited numbers and in an ad hoc manner from the MoEVT, UNICEF and NGOs. Learners do not pay any contributions.

11.4.3 Continuing education

Public secondary teachers deliver second-chance classes for O-level and A-level examinations in public secondary schools. Learners pay fees of TZS 10,000 per month to the teachers. Pre-vocational skills programmes are offered in public centres, by teachers who receive government salaries. Learners pay a one-off fee of TZS 2,000 and make ad hoc contributions for practical materials. The women's programme is facilitated by district adult education coordinators; groups are formed with the aim of establishing income-generating projects (see EFA assessment, p. 100 for more details). Students pay fees for the law programme.

11.5 Quality and relevance

11.5.1 Adult literacy

Looking at key inputs to the learning environment, on the positive side, learners are in small class sizes on average, and teachers are well-educated and experienced on the whole. According to the adult literacy survey, three-quarters of teachers have completed either ordinary-level or advanced-secondary education, and the minimum qualification is Form 2 completion. Just over 60% of teachers have more than five years' experience of teaching at adult literacy centres. On the downside, teaching and learning materials are in extremely short supply, and the vast majority of teachers have received less than three months’ training – a quarter have not had any training on adult teaching methodology, according to the adult literacy survey. This is inadequate when compared with the reality of a learning environment where teachers are required to teach adults in one class, at up to four different levels of the literacy curriculum, with minimal resources.

Retention in the adult literacy system seems to be a problem, given the enrolment figures in Figure 67 above. Learners at Stage 4 of the literacy curriculum are equivalent to only one-quarter of learners at Stage 1 in 2014, with similar patterns year-to-year. It is unclear why this happens, and whether this represents dropout or whether there is another explanation. Learners can join classes with different levels of literacy and numeracy skills, so not all learners are expected to start at Stage 1 and progress to Stage 4 but this might be expected to skew the distribution towards the top Stages.

Learners have the opportunity once per year to sit the final literacy examination. If they pass, then they have completed the course. The EFA assessment (p. 92) reported completion rates as rising from 73% in 2009 (487 graduates) to 86% in 2013 (586 graduates). The district-wise results are fairly erratic over this period; for example Urban increased its pass rate over the same period, from 23% to 100%, which is a very large change over a short period, although numbers enrolled in the examination are small (fewer than 25 learners in both years).

According to the self-reported skills of Stage 4 learners who took part in the literacy survey, 84% could read fluently and 76% could write letters – both expected skills in the Stage 4 curriculum. In mathematics, 29% could read numbers up to 1,000,000 and 26% could write them. Presumably, large numbers are included in the Stage 4 curriculum partly because of the application to understanding money and prices in Zanzibar. This evidence suggests that the majority of learners
who reach Stage 4 are acquiring literacy skills as intended, but most are struggling with understanding large numbers in numeracy.

To get some insight into the relevance of the literacy skills acquired through classes, the literacy survey asked learners whether they were able to cope in various life situations where literacy is required. More than two-thirds of learners reported that they were able to follow a doctor’s prescription (83%), buy medicine from a pharmacy (70%), or take a bus (67%). Less than 35% of learners were able to fill in bank forms (14%), interpret bills (23%), or read a kerosene meter (34%). These tasks are clearly relevant to everyday life, which suggests that the literacy programmes are having a positive impact on many learners' lives, although there is scope to improve their efficiency and effectiveness.

11.5.2 Alternative learning programmes

The school-based classes intend to offer a tailored service of support for students to obtain the skills set out in a condensed early grade primary curriculum at an accelerated pace. Typically students study under this programme for nine months to one year, before entering the formal education system. This arrangement is somewhat flexible depending on the needs of each student. Teachers assess students individually and judge when they are ready to join the formal system, usually at Standards 3 to 5. In practice, Figure 68 above illustrates that a sizeable share of students enrolled in alternative learning classes do not manage to enter the formal system. In 2015, about 64% of alternative learning students from the previous year joined the formal system.

Rahaleo Alternative Learning Centre provides two types of programmes to learners: a condensed basic education curriculum to develop literacy and numeracy skills, and six different pre-vocational training courses, including electrical installation, laundry and housekeeping and computer skills. The full programme can take up to two years, but there is flexibility for learners to take only the pre-vocational courses if their basic literacy and numeracy skills are sufficient. The learner-to-teacher ratio is 13:1 but class sizes are around 23:1 on average. Workloads are low, with most teachers having only 10 to 12 periods per week. Only six rooms are used for teaching, and they operate a double-shift. One major constraint on quality is that the majority of the teachers are qualified in primary education – very few have vocational training expertise. The centre employs three temporary specialists with technical and vocational skills to plug this gap; this means that some of the pre-vocational classes have close to 50 learners. It is difficult to estimate the completion rate of learners because of the flexible course length. Learners who receive a certificate of completion each year account for about 50% of learners enrolled (44% in 2015, see Annex K). If most learners are on a two-year programme then the completion rate is very high. If most opt for a one-year programme then the completion rate is closer to 50%.

11.5.3 Continuing education

For the participants in the second-chance classes, the objective is to pass (or pass with high marks) the Form 4 or Form 6 examination. Although data are available on pass rates for private non-school candidates, pass rates for continuing education students are not reported separately from those who self-study, who are in the majority. Only 41% of private non-school candidates passed the Form 4 examination in 2014, while 28% passed the Form 6 examinations. Unfortunately, this gives little insight into the success of second-chance programmes.

There is little readily available information on the quality or relevance of the continuing education programmes.
11.6 Conclusions

Taken together, adult literacy, alternative and continuing education services are reaching about 10,500 children, young people and adults through a diverse set of programmes. Coverage of the target populations is extremely low in all cases, and programmes vary in scale and effectiveness.

The largest programme is the adult literacy service, which has fairly stable enrolment, suggesting continued demand. Many adults who reach the final stages of the literacy programme are acquiring relevant skills, which is a considerable achievement given that the service is chronically under-resourced. The low-cost model of using existing buildings and recruiting secondary school leavers as teachers is working reasonably well, but the service could be much more effective if the teachers had regular in-service training and an adequate supply of teaching and learning materials.

The alternative learning centre which serves educationally marginalised young people is fulfilling an important need, but its current teaching force is not well-aligned to the needs of learners, leading to considerable inefficiency in resource use. It is operating on a small-scale, which is costly per learner, and has capacity to expand. It needs to ensure that all of its courses are relevant to the needs of potential enrollees, and that they are adaptive to changing demand. With available data it is difficult to estimate completion rates, and only ad hoc information is available on the destinations of graduates. Strengthening the management information system would help the institution to make informed strategic and operational decisions to fulfil its potential.

Demand for continuing education programmes appears to be falling, while needs are clearly growing. The management information system is weak, even accepting the fact that collecting reliable data in this subsector is particularly difficult, and is not well-integrated with the overall EMIS. Given the patchy data available on learner numbers, and the lack of information on any indicators of effectiveness of these programmes, an evaluation of this part of the subsector involving primary research would be useful.

There are some gender imbalances in participation in the different programmes which are not rooted in similar imbalances in the target populations. Programme planners need to develop strategies to attract participants from under-represented groups. This applies to non-literate men, boys who have never been to school, and potential female beneficiaries of some technical and vocational programmes.

Overall, the subsector appears fragmented, dominated by public provision, and difficult to manage within the existing weak management information system. In order to make better use of existing resources, as well as making a case for additional funding, the subsector needs a coherent strategy informed by targeted pieces of research especially in the areas where current information is unreliable and incomplete.
12 TVET

Box 23: Key findings on TVET

- There are a limited number of government providers but a large number of private providers of training courses in Zanzibar.
- Courses provided by KIST appear to be in demand, courses in the three VTCs do not and females are under-represented in all MoEVT courses.
- The VTA directly oversees the VTCs and has a QA role with private providers. However, oversight of private providers is very limited and quality is not ensured even in the VTCs. Independent observers find weak staff qualifications and limited equipment and workshops.
- A Skills Development Levy is paid by employers to Government but it is not clear where the money goes or for what purposes it is used.
- The VTCs do not carry out tracer studies of graduates nor do they have strong links with industry.

12.1 Background and recent developments

There are six institutions under the MoEVT, another five government institutions and at least 50 private providers offering TVET in Zanzibar. Of the MoEVT providers, two are technical secondary schools offering courses in a variety of hand-and-eye skills but aiming to help their students gain access to tertiary education. A third is KIST, which offers tertiary-level courses. The remaining three MoEVT institutions are the Mkokotoni, Vitongoji and Mwanakwerekwe VTCs.41

12.1.1 Public providers

The Government institution offering technician courses is KIST. KIST offers courses up to National Technical Award (NTA) level 6 and is registered with NACTE. Table 40 shows numbers enrolled over the past three years. As can be seen, numbers are rising and women are under-represented in all courses.

Table 40: Enrolment in KIST by gender and NTA level, 2013–2015

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NTA 4</td>
<td>NTA 5</td>
<td>NTA 6</td>
</tr>
<tr>
<td>All students</td>
<td>105</td>
<td>103</td>
<td>64</td>
</tr>
<tr>
<td>Male students</td>
<td>87</td>
<td>81</td>
<td>51</td>
</tr>
<tr>
<td>Female students</td>
<td>18</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Share female (%)</td>
<td><strong>17</strong></td>
<td><strong>21</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Source: EMIS/Budget tables 2015/16.

KIST offers a range of engineering courses in Civil Engineering and Transportation, Electrical, Mechanical and Automotive, Telecommunications and Electronic and Computer Engineering. Admission is post Form 4.

Currently, there are three VTCs: Mwanakwerekwe and Mkokotoni on Unguja and Vitongoji on Pemba. Each began offering NTA level 3 courses in 2010. The numbers enrolled in these over the past three years are shown in Table 41 below.

41 In addition, there are alternative education centres for adults offering continuing education in some vocational subjects.
Table 41: Enrolment in public VTCs by gender and year of study, 2013–2015

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 3</td>
</tr>
<tr>
<td>Mkokotoni</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mwanakwe rekrewe</td>
<td>129</td>
<td>104</td>
<td>98</td>
</tr>
<tr>
<td>Vitongoji</td>
<td>55</td>
<td>37</td>
<td>92</td>
</tr>
<tr>
<td>All VTCs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>305</td>
<td>224</td>
<td>261</td>
</tr>
</tbody>
</table>

Source: EMIS/Statistical Abstract 2014; Budget tables 2015/16.

The total number enrolled in 2015 was 468 students, of whom 131, or 28%, were female. The capacity of each VTC is 450 students so each is operating well below capacity. Especially noticeable is the relatively low level of female enrolment. Each VTC offers Tailoring courses and females outnumber males in these. In every other course, including ICT, males are in the majority. Courses offered in order of numbers enrolled are Electrical, Tailoring, Electronics, Plumbing, Masonry, ICT, Carpentry, Refrigeration, Welding and Fabrication, Motor Vehicle Mechanics, Food Production and Food Services and Painting and Decoration (Statistical Abstract 2014).

Numbers in KIST have risen by 78% since 2009; however, numbers in the three VTCs have remained static. Each began offering courses in 2010 but numbers declined each year from 2010 before almost doubling in 2014 and returning to 2010 levels in 2015.

Table 42 shows the numbers enrolled in government-supported technical and vocational courses since 2009.

Table 42: Total enrolment in VTCs and KIST

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Government (three VTCs)</td>
<td>0</td>
<td>461</td>
<td>400</td>
<td>339</td>
<td>283</td>
<td>580</td>
<td>468</td>
</tr>
<tr>
<td>KIST</td>
<td>178</td>
<td>237</td>
<td>185</td>
<td>336</td>
<td>272</td>
<td>282</td>
<td>315</td>
</tr>
<tr>
<td>Totals</td>
<td>178</td>
<td>698</td>
<td>585</td>
<td>675</td>
<td>555</td>
<td>862</td>
<td>783</td>
</tr>
</tbody>
</table>

Source: EMIS/Statistical Abstract 2014; Budget tables 2015/16. Note that the figures for 2013 are inconsistent between the two sources. The figure from the budget tables is included here.

It was difficult to determine the causes of the decline or indeed the rise again in 2014. However, key informant interviews and visits to one VTC indicate that TVET is held in low esteem in Zanzibar and the VTCs have not succeeded in filling available places.

The total enrolment in TVET compares to over 80,000 students enrolled in secondary schools. Where enrolment in the two technical secondary schools is added, the total receiving technical and vocational training in Zanzibar is fewer than 1,000 or just over 1% of the total in secondary schools. According to the Global Monitoring Report of 2012, the average share of TVET enrolment is 8% of total secondary enrolment across sub-Saharan Africa (UNESCO, 2010).

In addition to the three VTCs there are five other training institutions under Government Ministries: ZIToD, ZIFA, CHS, the Kizimbani Agriculture Training Institute and the IPA. Each of these institutes offers certificate courses and some, particularly ZIToD and Kizimbani Agriculture Training Institute, are critical for the industry they serve. As has been discussed earlier in Chapter 10, three of these colleges have been transferred to SUZA in 2015 and the others will be transferred over the next few years. A concern is the future of the certificate and short courses serving the industries.
12.1.2 Private providers

According to the study Effectiveness of Vocational Training towards Employment Creation for Promoting Young People’s Capacity Development in Zanzibar, conducted by the Ministry of Employment, there were 52 private providers in 2015, of which 'two-thirds were officially registered and provide training as per VTA standard'. Numbers are available from the VTA for the 25 private providers registered in 2013; these are shown in Annex L. As can be calculated, these graduated 1,364 students in 2013, of whom more than half (741) were female. Enrolments range from 271 in a private centre offering tailoring and computer applications to four in a centre offering courses in food production. These private providers are a vibrant part of the training provision in Zanzibar but concerns have been raised about quality of provision and value for money. It will be important to put in place QA mechanisms and make information on quality available to the public.

12.2 Oversight and regulation

The VTA was envisaged in the Vocational Education Training Policy published in 2005 and it established under the Vocational and Training Act no. 8 of 2006 to 'supervise vocational training through the determination of standards of training; the assessment, evaluation and registration of VET centres and the assessment, evaluation and approval of the capacity and skills of trainers and trainees'. The VTA is also mandated by the Act 'to coordinate vocational training by conducting research into the employment market, preparing and formulating curricula, providing vocational training, enhancing the capacity and skills of VET trainers and leaders, coordinating all certificates issued by registered vocational centres, and ensuring the availability of adequate funds for operation of the vocational training system'. The VTA directly supervises the three VTCs (including paying salaries) and also regulates and monitors private providers. Private providers pay to register with VTA; 36 were registered in 2015 and are fully accredited training providers.

Entry to VTC courses is open to those who complete Form 2 examinations successfully but the largest number of entrants are those completing Form 4 but not achieving the grades required to proceed to Form 5. In the first year students study for NTA level 1, in the second for NTA level 2, and in third year for NTA level 3. All qualifying for entry are interviewed and those judged capable of benefiting are offered places. It appears that most applicants are admitted. No information is available on the home and socioeconomic backgrounds of VTC students. Dropout rates are high in the one VTC visited but we were not able to determine rates in the other two.

In regard to ongoing courses, the VTA has an important QA role not only for its own VTCs but also for the private providers. It has not been able to carry out this QA function to its own satisfaction because of financial constraints. This is a concern. In addition to the role of the VTA, other mainland bodies appear to have a QA function, in particular the Vocational Education and Training Authority (VETA) which has a role in determining the quality of vocational and educational training on the mainland but may be determining quality in Zanzibar, particularly where vocational and educational training graduates wish to seek posts on the mainland or go on to further education in KIST. According to the recent UNESCO policy review, vocational and educational training graduates (including those from Zanzibar vocational and educational training institutions with VETA qualifications) are being accepted onto the Ordinary Diploma programmes offered by relevant tertiary institutions upon successful completion of a 12-week upgrading course (UNESCO, 2013). At KIST the minimum entry qualification for the Basic Technician Certificate (Level 4) includes a VETA certificate Level 3. KIST is registered with and its awards accredited by NACTE.
12.3 Staff and other quality enhancing inputs

Vitongoji VTC was visited for this situation analysis and has 25 teaching staff (and 21 other staff), including the centre coordinator, for its 247 students. This computes to a generous student-to-teaching staff ratio of 10:1. Of the 25 staff, four had degrees, seven had certificates and the remaining 14 had diplomas. It has been reported that the techniques employed by teachers were very out of date and teachers in the three VTCs were not given any time or resources to technically upgrade or refresh their skills.

In addition to staffing inadequacies, the VTA has observed that the resources at its disposal do not allow for supplies of consumables necessary to teach key subjects such as metalwork, carpentry or ICT. Again, observers confirm this: 'although workshop time was considerable at some schools, our observation was that the machinery used for demonstrations was normally old and no longer relevant to the modern working environment (with the exception of ZIToD). In most schools we also observed a lack of equipment and precautions related to health and safety' (RGoZ and Shell International: Analysis of Skill Gaps in Zanzibar. June. VSO 2014).

The same study examined the quality of provision in the three VTCs (and four other institutions) (VSO 2014). Each course was evaluated using seven quality assessment criteria, as listed below:

- Central governance; ICT competency; English skills; Teacher performance; Student performance; Industry exposure; and Workshop.

Schools were measured according to five standards:

- Does not demonstrate vocational education standard for metric; Somewhat meets the vocational education standard for the metric; Meets educational standard for the metric; Exceeds vocational education standards for the metric; N/A: not observed.

The results are provided in Figure 69 below.

**Figure 69: Assessment per school**

As can be seen, the top two performers on this assessment were ZIToD and a private college, Machui Community Training College.
In addition, the study assessed performance on different courses and states:

In summary we found instructors on these vocational training courses weren’t readily able to engage with industry, nor at times were they aware of developments in the sector. Individual schools we observed, even those teaching the VTA curricula, had different interpretations of the standards required. This is reflected in the wider variety of quality assessments made between the schools for similar trades.

12.4 Apprenticeship

Zanzibar, like many other countries, has a long tradition of skill development through informal apprenticeships, particularly for sectors such as arts and crafts, construction, retail trades, garment making and repair, and automobile maintenance. These informal arrangements lend themselves to poor quality training and often exploitation of the apprentice. In consequence, RGoZ has developed the Zanzibar Apprentice Development Policy with the main objective ‘to promote and regulate the provision of effective apprenticeship that is capable of responding to national international and socio economic development requirements and prepare the apprentices for decent and productive employment for all irrespective of gender’ (President’s Office, Labour and Public Service 2014c). This specifically states that all apprentices in formal apprenticeship training must be provided with the theoretical aspects of the training in vocational training institutions. However, implementation of this policy has not begun.

12.5 Links with the labour market

While the role of basic education is to ensure that all children complete a good quality primary education as the first priority in building the skills that individuals and societies need and to ensure that secondary education extends and consolidates these, ‘technical and vocational education and training shall be designed in line with labour market needs’. Accordingly, the links between VTCs and the labour market should be strong. Despite this, the UNESCO review (UNESCO 2013) found that a lack of evidence compiled on outcomes in terms of income supplementation, self-employment or employment is problematic for TVET programme decision-making and planning. Information about the post-training employment experiences of TVET course completers is either patchy or non-existent. At the micro level there is also little follow-up information about TVET graduates. As a result, the Zanzibari TVET system lacks mechanisms to evaluate the cost–benefit, quality and outcomes of training. Tracer studies focusing on post-training employment and wages are not conducted.

Two years later we could not find systematic tracer studies of graduates by any VTCs or evidence of broad labour market consultation by VTCs before the introduction of new courses. The VSO 2014 study referred to above found that ‘the private sector in Zanzibar was rarely engaged on a substantive ongoing basis with TVET. This has partially stemmed from lack of proactive engagement with industry on the part of TVET, but also highlights the lack of business confidence in the private sector’.

Unsurprisingly, some VTC graduates have difficulty finding jobs. A survey carried out by the Ministry of Works and Employment on unemployment among young people found that almost half of VTC graduates found jobs within six months, a quarter within 12 months, but that another quarter took two years or more to find jobs. While the review commissioned by RGoZ/Shell International (VSO, 2014) found ‘the lack of a career placement service, tracing the progress of employment of graduates leaving the school and helping existing students to obtain jobs’.
On the other hand a study by the MoEVT on employers' satisfaction with Skills Development Centres' and ZIToD found that most employers were satisfied with the graduates they employed. This study was particularly focused on ZIToD graduates, tracking 20 of their graduates (from a total of 30 graduates in all) (MoEVT, 2014c). It could be that a combination of the close relationship between ZIToD and the tourism industry, the significant growth of tourism in Zanzibar and the awareness by the general public of this all combine to make ZIToD courses particularly relevant. However, further study is needed to determine reasons and to apply lessons to other training courses and institutions. It will be particularly important for SUZA to ensure that the certificate-level and short courses continue to serve industry needs.

Box 24: Case study: ZIToD

ZIToD was established by the RGoZ in 1992. It offers two two-year diploma courses, five two-year Technician Certificate courses and six one-year foundation courses as well as intensive short programmes and outreach programmes, all aimed at serving the Hospitality and Tourism Management industry in Zanzibar. The diploma courses are recognised by the Confederation of Tourism and Hospitality, an awarding body who are the regulators of qualifications exams and tests in England Wales and Northern Ireland. ZIToD has close ties with the Tourism industry in Zanzibar, particularly with the Zanzibar Council on Tourism, the Zanzibar Association of Tourism Investors and the Confederation of Tourism and Hospitality. As has been explained, ZIToD is being absorbed by SUZA and it is unclear which of the current courses will continue or what the relationship with the Confederation of Tourism and Hospitality will be in the future.

12.6 Employer training

In addition to direct enrolment on government and private courses, many employers, public and private, arrange training for their employees. Some of this training is provided in-house by the employer, while some is provided in training institutions selected by the employer. The national manpower survey of 2013 sampled 16,453 employees in Zanzibar. Of these, 1,533 were enrolled in training institutions at the time of the survey. In addition, the survey found that 58.3% of those sampled had had training of some kind since beginning employment. Of these 46% had received training in formal institutions, 28% had received on the job training and the remainder had been trained in-house or through workshops and seminars (Planning Commission, 2013).

12.7 Government financial contribution to TVET

Government funding to TVET in Zanzibar passes through the VTA. This body received a total of TZS 988 million of government subvention in 2014/15 (Table 43). The VTA receives and distributes subvention for the three VTCs and this is elaborated further below. Note that the Government also funds TVET through two technical secondary schools and KIST, and these were included under Secondary and Tertiary Education spending respectively.
### Table 43: Government recurrent expenditure on TVET, 2014/15 (TZS millions)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Salary</th>
<th>Non-salary recurrent*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zanzibar VTA</td>
<td>732.0</td>
<td>255.8</td>
<td>987.8</td>
</tr>
<tr>
<td>Total TVET</td>
<td>732.0</td>
<td>255.8</td>
<td>987.8</td>
</tr>
<tr>
<td>Total MoEVT Recurrent spending</td>
<td>69,675.6</td>
<td>10,768.1</td>
<td>80,443.7</td>
</tr>
<tr>
<td>TVET as a % of total</td>
<td>1.1%</td>
<td>2.4%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Source: MoEVT Accountant/IFMIS. * Non-salary recurrent includes allowances, social benefits, supplies and consumable goods, and capital expenditure.

As can be seen, total expenditure by RGoZ on technical and vocational training at all pre-university levels represented a total of 1.2% of the MoEVT budget in 2015.

#### 12.7.1 VTA recorded income

The VTA accounts for the income and expenditure of the VTA head office, the VTA coordinator in Pemba, and the three VTCs. KIST receives its own subvention. The VTA receives a government subvention for salaries and other charges, and it pays the salaries of all VTA and VTC employees directly. The VTCs generate income from tuition and accommodation fees, application forms, renting out their hall, workshops, and other activities. The income from each of these activities is set out in Table 44. In 2014/15, the VTA received TZS 985 million from the Government as subvention. Total income from tuition and accommodation fees was TZS 44 million. Overall income was TZS 1.1 billion.

### Table 44: VTA and VTCs income, 2014/15 (TZS)

<table>
<thead>
<tr>
<th>Income category</th>
<th>Government Subvention</th>
<th>Mkokotoni VTC</th>
<th>Mwanakwer ekwe VTC</th>
<th>Vitongoji VTC</th>
<th>Other source</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>732,036,295</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>732,036,295</td>
</tr>
<tr>
<td>Other charges</td>
<td>253,760,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>253,760,000</td>
</tr>
<tr>
<td>Other VTA income</td>
<td></td>
<td>11,246,000</td>
<td></td>
<td></td>
<td></td>
<td>11,246,000</td>
</tr>
<tr>
<td>Tuition and accommodation fees</td>
<td>7,387,000</td>
<td>8,530,000</td>
<td>28,426,000</td>
<td></td>
<td></td>
<td>44,343,000</td>
</tr>
<tr>
<td>Application form</td>
<td>300,000</td>
<td>605,000</td>
<td>480,000</td>
<td></td>
<td></td>
<td>1,385,000</td>
</tr>
<tr>
<td>Hall hiring</td>
<td>250,000</td>
<td>25,000</td>
<td>3,270,000</td>
<td></td>
<td></td>
<td>3,545,000</td>
</tr>
<tr>
<td>Workshop services</td>
<td>1,788,000</td>
<td>1,226,500</td>
<td></td>
<td></td>
<td></td>
<td>3,014,500</td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td></td>
<td>9,272,200</td>
<td></td>
<td></td>
<td>9,272,200</td>
</tr>
<tr>
<td>Total</td>
<td>985,796,295</td>
<td>9,725,000</td>
<td>10,386,500</td>
<td>41,448,200</td>
<td>11,246,000</td>
<td>1,058,601,995</td>
</tr>
</tbody>
</table>


Zanzibar VTA and its VTCs receive some non-recurrent income. From donors, the VTA has been a beneficiary of AfDB's ALSD programme. ALSD I built two of the three VTCs. The second phase (ALSDII) was expected to build two new VTCs (although this is under review) and possibly also construct a head office for the VTA (as their current building is rented). The ALSD programme has also included funds for capacity development, such as sending new instructors for training in vocational teaching methods. The VTA have also received in-kind support from donors. For
example, Iran provided equipment for workshops in January 2015, and around 20 VTA employees (and staff from KIST and secondary schools) were sent on an associated training course.

### 12.7.2 VTA expenditure

In 2014/15 the Zanzibar VTA and its training centres spent a total of TZS 1.2 billion (Table 45). The largest portion of this was spent by the head office, which spent over TZS 1 billion. However, all salaries for the training centres and Pemba Coordinator’s office are paid directly from the head office in Unguja, explaining why the head office expenditure is so high.

**Table 45: VTA and VTCs expenditure, 2014/15**

<table>
<thead>
<tr>
<th>VTA Centre</th>
<th>Expenditure (TZS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTA head office Unguja (includes all salaries)</td>
<td>1,032,470,036</td>
</tr>
<tr>
<td>VTA coordinator’s office – Pemba</td>
<td>19,394,786</td>
</tr>
<tr>
<td>Mkokotoni VTC</td>
<td>14,345,410</td>
</tr>
<tr>
<td>Mwanakwerekwe VTC</td>
<td>17,130,222</td>
</tr>
<tr>
<td>Vitongoji VTC</td>
<td>72,859,677</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,156,200,131</strong></td>
</tr>
</tbody>
</table>


### 12.7.3 Vitongoji VTC income and expenditure

Vitongoji VTC receives no direct government funds itself – salaries are paid directly to staff by the VTA – and while the VTC requests funds from subvention for other charges, they have not received any since 2013. However, the VTA does provide examination materials to the VTCs.

As mentioned above, Vitongoji generates its own income, which totalled TZS 41.4 million in 2014/15. The largest source of income was tuition and accommodation fees. Fees for all courses are TZS 120,000 per year. Boarding students pay an additional TZS 40,000 per year. Students do not pay examination fees – this is paid for from the VTA head office budget.

**Figure 70: Vitongoji VTC operating income, 2014/15 (TZS, total TZS 41.4 million)**
The VTC directed expenditure of TZS 69.8 million in 2014/15, of which the largest part was to office supplies and services (TZS 23.8 million), which included TZS 19.6 million on teaching materials. Other large items of expenditure were bus allowances (TZS 9.3 million), electricity bills (TZS 4.7 million), petrol (TZS 4.9 million), building maintenance (TZS 8.2 million) and a transfer to VTA head office (TZS 6 million).

Table 46: Vitongoji VTC expenditure, 2014/15

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenditure (TZS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitongoji VTC expenditure</td>
<td></td>
</tr>
<tr>
<td>Other wages and salaries (allowances)</td>
<td>9,445,100</td>
</tr>
<tr>
<td>Communications supplies and services</td>
<td>5,548,550</td>
</tr>
<tr>
<td>Hospitality</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Travelling expenses</td>
<td>2,271,400</td>
</tr>
<tr>
<td>Utilities and fuel</td>
<td>6,650,590</td>
</tr>
<tr>
<td>Office supplies and services</td>
<td>23,780,193</td>
</tr>
<tr>
<td>Renovation of physical infrastructure</td>
<td>8,189,704</td>
</tr>
<tr>
<td>Maintenance of machinery and equipment</td>
<td>2,674,060</td>
</tr>
<tr>
<td>Transfers to other units, including VTA headquarters</td>
<td>6,441,410</td>
</tr>
<tr>
<td>Miscellaneous others (student meals)</td>
<td>3,560,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>69,761,007</strong></td>
</tr>
<tr>
<td>Subvention salaries (paid from VTA directly)</td>
<td>146,993,400</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>216,754,407</strong></td>
</tr>
</tbody>
</table>

Source: VTA Financial Statement 2014/15 and VTA Accounting Officer. Note: The Financial Statement reports a total expenditure of TZS 72,859,677, which does not equal the sum of the sub-components (TZS 69,761,007).

The unit cost per student at Vitongoji has been calculated based on total spending by Vitongoji and on its staff salaries, and using the number of students enrolled in 2015. On these assumptions, the cost is TZS 938,331 per year, and therefore more than TZS 2.8 million over the duration of a three-year course. Since this does not include the examination costs incurred at VTA head office, it may be an underestimate. In addition, it does not include an imputed cost for the VTA oversight, arguably part of the cost of training a student in the VTC.

The unit cost per VTC student of TZS 938,331 or USD 434 can be compared to the unit cost of a secondary school student at TZS 350,000 or USD 162.

12.7.4 Skills Development Levy

The 2007 Vocational Training (amendments) act established a Vocational Training Fund to be managed by VTA and imposed the Skills Development Levy payable by all employers with four or more employees. The levy is 5% of total gross monthly pay. Initially, RGoZ contributed to the training fund but its contributions ceased in 2012 and the fund's sole source of support is now the payroll tax.
Table 47: Skills Development Levy sources 2008/09 to 2011/12 in TZS ’000s

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>2,253</td>
<td>3,000</td>
<td>3,000</td>
<td>0</td>
</tr>
<tr>
<td>Private</td>
<td>771</td>
<td>939</td>
<td>2,065</td>
<td>2,231</td>
</tr>
<tr>
<td>Total</td>
<td>3,024</td>
<td>3,939</td>
<td>5,065</td>
<td>2,231</td>
</tr>
</tbody>
</table>


It is reported (See UNESCO 2014) that this tax is not appreciated by employers, who do not know what it is being used for. In addition, while the fund was intended to support training (and to be managed by the VTA), it has now been determined that 60% of the fund will be provided for higher education and 40% for training. However, interviewees at SUZA and VTA said they had not ever received any financing from the fund. It may be that the MoF does not communicate the relationship between funds received and the Skills Development Levy.

12.8 Conclusions

Oversight of private providers by VTA should continue beyond registrations. This oversight should not be 'inspectorial' but aimed at building quality. The VTA should ensure that quality assessments are available to the public.

Linkages between the VTA, VTCs and KIST, on the one hand, and employers and entrepreneurs on the other should be strengthened: one way is to commission tracer studies of graduates and act on these; another is to involve more employers in VTC boards.

Finance for VTA needs to be secure, predictable and utilised in consultation with employers. MoF should transfer the Skills Development Levy transparently to the VTA and VTA should use the levy monies for training activities determined in consultation with employers.

It would be useful to conduct a 'root and branch' review of VTCs including costs, internal efficiency, relationship to employment and course offerings with a view to ensuring that the VTCs are well-staffed and equipped, provide courses in demand, and they fulfil the intention that they provide a model for private providers.
13 Conclusion

13.1 Introduction

This chapter highlights the key findings and conclusions from this education situation analysis. These findings, along with the deeper analysis and descriptions in the preceding chapters, and the separate review of ZEDP implementation progress, should guide the development of the next education sector plan.

Education stakeholders participating in the ELAB should draw on the conclusions of the ZEDP review and this situation analysis to identify priority recommendations for strategies and activities in the next five years. In this chapter, we run through the key conclusions of this analysis in the same order as they were presented in separate chapters of the report.

13.2 Enrolment, internal efficiency and OOSC

There has been much progress in implementing the 2006 Education Policy on access, transitioning to the 12 years of compulsory basic education. More than a third of children are accessing pre-primary education, and almost all children enter primary school at some point. Of these, most (89%) reach the final Standard, and based on previous trends almost all final Standard students—in this case the last cohort studying under the previous system (Standard 7) and the first in the new system (Standard 6)—will move to ordinary secondary education in 2016.

It is important to keep up the pace of pre-primary expansion towards the goal of full coverage. The risk of only partly meeting this objective is that many children enter Standard 1 unprepared for the curriculum content, which has been designed on the assumption that children have a pre-primary foundation. Repetition rates are relatively high in Standard 1, which is costly and unlikely to be an effective way of supporting weaker students to reach learning standards. Children without pre-schooling are particularly vulnerable to the risk of early repetition.

At primary level late entry to school is a considerable problem and risks damaging children’s learning achievement and retention, as seen in the international evidence. More understanding of the causes of over-age entry would help to inform interventions.

The objective of four years of compulsory ordinary secondary education, as part of the basic education cycle, is not currently being achieved because the first cohort of students that fall under this policy are due to enter secondary school only in 2016. Up to now, considerably less than half of children access Form 4, and this low retention is because of a range of factors, including poor teaching of mathematics and science, limited classroom interaction, culminating in poor performance in the selective Form 2 examination. This results in a large proportion of children leaving the system after completing Form 2, which marks the end of basic education under the previous policy. To ensure that the cohort following the new policy will be retained in secondary school for four years there needs to be a change in pedagogical practice and student support, as well as a review of the purpose and nature of the Form 2 examination, and steps to mitigate economic barriers to access and other causes of dropout.

The system narrows markedly at advanced secondary or college education, with about 6% gaining access. An increasing number of students who qualify for Form 5 are choosing to study in colleges instead of advanced secondary. Further research would be useful to better understand why students are choosing this path (for example choosing PUCs over A-levels) and where they are studying. If this trend continues it will free up resources (teachers, classrooms especially) that could be utilised at ordinary secondary level. Expanding access to post-basic education is
highlighted in the 2006 Education Policy, so understanding the demand and presenting opportunities to continue studying, including in technical and vocational education, will be important in stemming the flow of students out of the system.

13.3 Cost and financing overview

Education receives a sizeable amount and share of spending. MoEVT spending has increased from TZS 59 billion in 2010/11 to TZS 90 billion in 2014/15. Spending by government accounted for around 16–22% of the national budget in the last decade, and had a value of 3.8–4.5% of GDP, which is in line with international guidelines on education spending.

Salaries are the main driver of spending, accounting for 77% of MoEVT spending in 2014/15 — and this has increased from 60% in 2010/11. The ministry's salary bill takes up 38% of the Government's total salary bill for ministries. The prioritisation of salaries means that non-salary recurrent spending is more likely to be squeezed out and the ministry is less likely to receive its full budget from the MoF — it received only 68% of the original budget in 2014/15.

A major change to the financing structure of the MoEVT is the removal of voluntary contributions; instead the Government will purchase goods for schools, covering the full cost of basic education. Until now it was estimated that households allocate around 2% of their expenditure to education, and the announcement that they will no longer pay contributions has been greeted positively.

However, this change comes with risks. First, it leaves schools with no discretionary funds, and no clear guidance on how to fund items for which the Government will not pay. Second, there may be inefficiencies in allocating items across schools. Finally, and critically, given the problems with release from MoF, it is very probable that the funds will not be made available in full. The MoEVT will be left without the funds it needs to deliver what parents and teachers expect. It will be critical to plan how to manage this, including negotiations with MoF, prioritisation of purchases, and communication to schools and parents. There can be a serious impact on the quality of teaching and learning if these items are squeezed out. It would be beneficial to commission a study to understand the items which the MoEVT will not be able to purchase, and methods for schools to cover these costs.

13.4 A closer look at the MoEVT budget

The MoEVT has not released the full amounts budgeted for non-salary recurrent spending, and prioritisation has to take place in allocations. The semi-autonomous bodies receiving subvention, and MoEVT departments at Unguja, tend to receive and spend more of their original budgets than coordinating units at Pemba. However, the Unguja departments purchase items — such as exam fees, furniture, and sports goods — centrally. Over 50% of the non-salary recurrent spending goes to student loans, so it will be important to understand the value, likely return to Zanzibar, and future sustainability of this spending.

Development expenditure has fallen substantially in the last two years, from TZS 28 billion in 2012/13 (30% of spending) to TZS 10 billion in 2014/15 (10% of spending). Funds from donors vastly outweigh government contributions in terms of development projects. Many of the activities in these projects might be considered routine, such as teacher training, and they may be better placed within the Government-funded recurrent budget. Low execution rates of donor funds against the budget suggest challenges in accurate planning and implementation of activities, as well as bureaucratic processes.
Spending by subsector shows that as the level of education increases the share allocated to it falls, with pre-primary and primary receiving around half of all spending. However, average spending per student has the opposite pattern, and the higher levels have far fewer students and much higher average costs. Spending per student ranges from less than TZS 70,000 per year in adult/alternative education to over TZS 4 million in the VTCs, KIST and SUZA.

13.5 Student learning

Levels of learning achievement are low, particularly at the primary and ordinary secondary levels. The majority of students are not acquiring the skills and knowledge stipulated in the basic education curriculum – more than 20% of students entering Form 1 have failed the Standard 7 examination. The direct consequence of this in the secondary cycle is that a very large proportion of students leave the schooling system after taking selective examinations at the end of Form 2 and Form 4. A small minority are achieving well at all levels.

The assessment system itself is problematic. The volatility in the externally set examination pass rates over time, when access has not been shifting dramatically, raises questions about the validity and reliability of the test instruments. It seems unlikely that there is such volatility in the underlying skills and knowledge of students. Similar concerns are raised by the large variations in average scores on the internally set examinations. Lack of a strong relationship between the Form 2 and Form 4 examination results further indicates the need to review the assessment system.

A major research project found significant effects of language on Form 2 examination performance, and there are also perceptions that the nature of the Form 4 examination is a considerable barrier for many students in demonstrating their knowledge and skills. This raises the question of what the assessments are currently measuring, and merits further investigation.

The consequences for the life-chances of individuals, and collectively for the external efficiency of the education system, are profoundly affected by the system of assessment, and so concerns about its effectiveness need to be taken very seriously. There needs to be a comprehensive review of the assessment system, including analytical work on recent examination data to establish if the instruments are fit-for-purpose.

13.6 Teachers and classrooms

The situation for teachers has some positive news: there are sufficient numbers of teachers at every level and the vast majority have a teaching qualification. Further, approximate projections of supply of and demand for primary and secondary teachers indicate numbers graduating are likely to be sufficient in the medium-term.

However, the utilisation of teachers is inefficient: at the macro level the processes for assessing recruitment needs and deploying teachers are opaque and not functioning well. Modalities to identify teacher needs (including parameters of demand) and for teacher recruitment and deployment should be assessed and revised and final agreements communicated to all levels of the MoEVT, school, DEO and headquarters departments.

At the micro level there is inefficiency within schools, owing to the shortage of classrooms, which reduces contact hours, and the designation of lower-primary teachers as subject teachers rather than as teachers for whole classes. It would be useful to study the time teachers actually spend in class teaching and the reasons for this, as well as observe the way that they teach.
There are also some specific training needs for teachers: there is a shortage of teachers trained in pre-primary methods, and limited mathematics and science teachers; many teachers’ grasp of English is insufficient for teaching in upper primary. Zanzibar is leading the way with the work and role of TCs and distance education courses, but the TCs need more resources to help their work. They could develop mechanisms to support teachers, particularly in English language instruction, pedagogy, and subject-specific content. An evaluation of the current provision of teacher education, including pre-service and in-service, could provide valuable information to schools and the MoEV. This study should cover quality at entry and graduation, and impact of graduates at school level.

There is an acute need for more classrooms and infrastructure across the levels of schooling. With plans to expand pre-primary, an increase in enrolment to cover 50% of four to six year olds would require 140 new classrooms per year up to 2020. At the primary level there is already a huge shortage, with 39% of classrooms used for double-shifting. There is also a wide geographical disparity in the availability of classrooms in public primary schools: the pupil to classroom ratio ranges from 43:1 in South to 99:1 in West. At the secondary level, the average class size is currently 38:1 but 20% of classrooms are used for double-shifting. With a double-cohort entering Form 1 in 2016, there will be enormous pressure on the physical infrastructure.

13.7 System capacity

Many of the central units, departments and autonomous agencies established by RGoZ and the MoEV have clear functions and sufficient staff but very limited resources to implement those functions.

The decentralisation structure involving Regional and District Education Offices are not widely understood even by REOs and DEOs. While these function well in large countries it could be questioned whether Zanzibar benefits from this type of decentralisation and whether it supports pupil learning. A study of the current system that examines roles and functions and their impact on learning outcomes should be undertaken. This should be followed by a study of the costs and cost-effectiveness of each unit within a realistic resource envelope. Meanwhile, responsibility for education delivery could be profoundly affected by the Enacted Law of Local Authority. This will need analysis and discussion and the impact on each agency determined.

The process of discussing and planning desirable policy measures, such as establishing autonomous agencies or extending the years of compulsory schooling, may not have included a medium-term analysis of the finance needed and of affordability.

The EMIS is established and functioning. Concerns include fragmentation of data sources, fragility of data storage, and limited dissemination – the statistical abstracts should be published at the same time each year.

13.8 Equity

There is considerable inequality in learning achievement, access to and resourcing of education at all levels.

Gender disparities are evident in learning outcomes and in rates of exclusion from school, but the picture is inconsistent. Boys of primary age are far more likely to be excluded from school than girls, putting them at greater risk of over-age entry or of never entering school. Girls also outnumber boys in secondary schools in all districts. Meanwhile, girls outperform boys on the Form 2 examination, and the reverse is true at Form 4. Evidence from a recent early grade learning
assessment suggests that gender disparities start early. Girls found mathematics harder than boys did, while the opposite was true in Kiswahili reading skills. Systematic qualitative research in classrooms would be useful in trying to understand the causes of this.

There are large geographical differences in examination performance, enrolment capacity and exclusion from school. Children of primary- and secondary-age are much more likely to be out of school if they live in a rural area. The capacity and take-up of education services is comparatively low in Pemba's four districts and in North B (Unguja). Pemba is also relatively disadvantaged in teacher allocation, and some of its districts have some of the worst classroom shortages too.

There is scant data to allow accurate analysis, but rates of exclusion are considerably higher for young people with disabilities. Physical infrastructure and appropriate teaching and learning materials may be barriers to participation for children with special educational needs. The GPE programme is supporting activities to strengthen inclusive education.

Income is a clear barrier to schooling, with children from poorer households much more likely to be out of school. To mitigate this, there needs to be consideration of both the direct and indirect private costs of education, as well as the opportunity costs. Removing voluntary parental contributions is a positive step but will not address all the issues.

### 13.9 ECD

Zanzibar is making progress on expanding access to pre-primary education, and it is estimated that between a third and half of children enrol in some kind of pre-schooling. However, many children enrol over-age, and income remains a barrier for those not yet enrolled.

The Education Policy directive to include two years of pre-primary in basic education has until now come with strong partnerships with the private sector and communities as providers of pre-school services. More recent drives to open pre-primary classes in existing government primary schools could drastically change the landscape of pre-school education, but many of the implementation details and implications are yet to be worked out.

There are immediate issues to address: finding enough classrooms, finding teachers, training teachers, and producing sufficient teaching and learning materials. Then there are longer-term questions. What will happen to Tutu centres, and community schools? What will be the additional burden on the MoEVT’s salary bill? Will parents be expected to make any resource contributions to pre-primary education? Will pre-primary children receive a school meal, as they have in the past? The MoEVT would benefit from developing future scenarios, management strategies and implementation plans to adequately prepare for and communicate these changes.

Zanzibar has some catching up to do to qualify its pre-primary teachers in ECE and methods. There are good efforts to address this, and it will be important to understand how far the existing schemes will cover the current cohort and additional teachers needed. The existing programmes, such as at MECP, ECACP, and SUZA present existing materials and capacity, and the MoEVT should ensure continued cooperation to minimise duplication of efforts.

### 13.10 Tertiary education

Zanzibar has a range of institutions offering tertiary courses, and with an estimated 9,300 students enrolled on the island in 2014 and 1,600 on the mainland or abroad, participation rates are higher than the average across low-income countries.
The current rationalisation process with SUZA absorbing other government tertiary institutions is likely to improve the quality of diploma and degree-level courses. It will be important that certificate and continuing education courses that serve industry continue to be supported. The costs per graduate at SUZA are high, but are expected to come down as the institution enters a more stable growth phase.

Higher education, including student loans, currently takes about 17% of MoEVT expenditure and this will rise as SUZA absorbs other government training institutions.

The downward trend in the number of secondary school students qualifying to enter universities gives cause for concern, particularly the numbers qualifying for science and technology courses. While this needs to be dealt with at the level of secondary school, universities could support these efforts, such as through pre-entry courses.

The establishment of ZHELB may increase opportunities for young people from low-income families to participate in higher education. However, the scheme should be monitored to maximise value for money in terms of students and subjects being targeted, and repayments. Over half of the MoEVT’s non-salary recurrent spending goes to ZHELB. Using some simplifying assumptions it is estimated that even with full repayment, the repayment value of the loans made so far will be only 70% of their original value, due to inflation. A cost–benefit analysis of the current loan scheme, including a number of alternative options, would provide valuable information to RGoZ.

As universities diversify their programmes, it will become even more important to monitor industrial demand and employment of graduates. Tracer studies of graduates should be carried out regularly and results discussed by providers.

13.11 Adult and continuing education

This subsector provides literacy classes for adults, as well as a range of alternative and continuing education services, including courses for young people who have either never attended school or have dropped out early on. Overall, the services reach about 10,500 children, young people and adults through a diverse set of programmes. There is a high need for services, but coverage of the target populations is extremely low in all cases, and programmes vary in scale and effectiveness.

The sector is chronically under-funded. Less than 0.9% of the MoEVT’s recurrent spending went to this subsector in 2014/15.

Looking at the subsector overall, provision is fragmented, dominated by public providers, and difficult to manage with the existing weak management information system. In order to make better use of existing resources, as well as making a case for additional funding, the subsector needs a coherent strategy informed by targeted pieces of research especially where information is unreliable and incomplete.

13.12 TVET

There are a limited number of government TVET institutions but a large number of private providers. In the light of this, the VTA should extend its oversight to include quality assessments, rather than simply registrations. In addition, quality could be further ensured within the VTCs under the VTA’s authority.

Linkages between the VTA, VTCs and KIST, on the one hand, and employers and entrepreneurs, on the other, should be strengthened. Courses at the VTCs are running under-capacity; the low
demand for them may be due to poor relevance to employability for graduates. One way to improve this is to commission tracer studies of graduates and act on these; another is to involve more employers in VTC Boards.

The finance for the VTA needs to be secure, predictable and utilised in consultation with employers. The MoF should transfer the Skills Development Levy transparently to the VTA and VTA should use the levy monies for training activities determined in consultation with employers.

It would be useful to conduct a deeper review of VTCs including costs, internal efficiency, relationship to employment and course offerings. This would aim to ensure that the VTCs are well-staffed and equipped, providing courses demanded by employers, and that they provide a role model for private providers.

13.13 ZEDP review

The ZEDP review (Kundi and Mohammed 2015b) found that of 103 initial targets, 38 had been fully achieved and 27 partially achieved, leaving 38 targets not implemented at all. The review identified a number of 'blocking factors' which hindered the progress in implementing ZEDP activities and targets:

- Inadequate coordination and effort to mobilise resources for the plan's implementation, particularly in terms of government funding;
- Lack of comprehensive monitoring and evaluation;
- Inadequate capacity of actors;
- Weak community involvement in implementation; and
- Lack of a structured process for translating the plan into clear day-to-day implementation roles for key internal and external stakeholders.

Finally, the ZEDP review team concluded the ZEDP was too ambitious and lacked a clear mechanism for prioritisation.

13.14 Concluding remarks

This situation analysis has brought to light a number of successes: expanding access at primary level; making some rapid strides in access to pre-primary; providing in-service support to teachers through TCs; having a high proportion of qualified teachers; coordinating efforts to raise teacher qualifications at pre-primary; and enrolling more students in tertiary education and supporting them with student loans. In addition, the Government has been committing significant funding to education, 16–22% of national spending in the last 10 years.

However, major challenges remain: income, geography and, to some extent, gender impact on access to education and learning; selection examinations at Form 2 and Form 4 are the main reason that students leave the system currently and the examination system itself lacks validity; learning achievement is low at primary and ordinary secondary level, and further efforts are needed to improve teachers' pedagogical practices; more classrooms are needed to make better use of teachers and to reduce class sizes; teacher deployment is opaque and inefficient; vocational training courses are not in high demand from students and many graduates not valued by employers; the standard and quality of courses is not ensured and consistent; financing for student loans may be unsustainable.
An overriding theme is that planning and preparation for policy directives needs to improve – to realistically prepare for the eventualities, the financing needs, and to manage communication with other stakeholders. This corresponds with the findings of the ZEDP review, which emphasised a lack of processes for translating plans into more detailed implementation arrangements, with adequate resources identified, appropriate to the available capacity, and with monitoring and evaluation systems in place.

The upcoming ELAB will present an opportunity for the MoEVT and education sector stakeholders to review all the progress and remaining issues, in order to set a new agenda for the next five years. Recommendations from the ELAB may include a number of further studies into issues raised in this report, to better understand the problems and plan for solutions. The MoEVT may want to look for support in strengthening its planning process, giving more time and resources to preparing medium-term implementation plans as an input to decision-making.
References


Global Partnership for Education (undated) GPE Programme 2014–16 Annual Report 2014 Zanzibar, GPE.


Ministry of Education and Vocational Training (various years) *Budget Speeches*, RGoZ Zanzibar.


National Bureau of Statistics and ICF (2011) *Tanzania Demographic and Health Survey*, Dar es Salaam Tanzania and Maryland USA.


President’s Malaria Initiative (2014) *Tanzania Malaria Operational Plan FY 2014*.


VSO: Shell Kick-off meeting, *Vijana Na Ajira Project, Linking Youth Enterprise and Employment Opportunities*, VSO presentation.

Vocational Training Authority (2015) *Alternative Learning and Skills Development Project Phase II: Provision of services to assess policies, procedures and internal governance arrangements in Vocational Training Authority, Zanzibar*.


