



Ministry of Education
Puntland State of Somalia



Puntland Education Sector Analysis '16
Ministry of Education and Higher Education

Developed by Carfax Projects
Puntland State of Somalia
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Definitions and Acronyms

ABE – Alternative Basic Education

ADRA – Adventist Development and Relief Agency

AET – African Education Trust

CARE – The International Cooperative for Assistance and Relief Everywhere

CEC – Community Education Committee

CFBT – Council for British Teachers

CFW – Curriculum Framework

CHE – Commission for Higher Education

DEO – District Educational Organisation

DFID – United Kingdom Department for International Development

DG – Director General

DHE – Department for Higher Education

DPP – Department of Policy and Planning

EBTVET – Enterprise-Based TVET

EC – European Commission

ECD – Early Childhood Development

ECE – Early Childhood Education

EGRA – Early Grade Reading Assessment

EMIS – Education Management Information System

ESA – Education Sector Analysis

ESC – Education Sector Committee

ESSP or PLESSP – Puntland Education Sector Strategic Plan

EU – European Union

FABE – Flexible Approach to Basic Education

FGD – Focus Group Discussion

FPE – Free Primary Education

GDP – Gross Domestic Product

GER – Gross Enrolment Ratio

GPE – Global Partnership for Education

GTEC – Garowe Teacher Education Centre

HE – Higher Education

HEI – Higher Education Institutions

HIV – Human Immuno-Deficiency Virus

HR – Human Resources

HRD – Human Resource Development

HRM – Human Resources Management

IBTVET – Institution-Based TVET

IDP – Internally Displaced Person

IQS – Integrated Quranic Schools

JRES – Joint Review of the Education Sector

KII – Key informant Interview

MLA – Measuring Learning Achievements

MoE&HE or MoE&HE or MoE&HE – Ministry of Education and Higher Education

NA – Needs Assessment

NFE – Non-formal Education

NGO – Non-governmental Organisation

NORAD – Norwegian Agency for Development Cooperation

NRC – Norwegian Refugee Council

PAS – Performance Appraisal System

PCR – Pupil-Classroom Ratio

PDR – Pupil-Desk Ratio

PEPP – Puntland Education Policy Paper

PL – Puntland

PLR – Pupil-Latrines Ratio

PNEB – Puntland National Examinations Board

PPP – Purchasing Power Parity

PTR – Pupil Teacher Ratio

QA – Quality Assurance

QAS – Quality Assurance and Standards

REO – Regional Educational Organisation

SCI – Save The Children International

SNE or SEN – Special Needs Education

TCR – Trainee-Classroom Ratio

TVET – Technical and Vocational Education and Training

UK – United Kingdom

UN – United Nations

UNESCO – United Nations Educational, Scientific, and Cultural Organisation

UNFPA – The United Nations Fund for Population Activities

USAID – United States Agency for International Development

USD or US\$ - United States Dollars

VQA – Vocational Qualifications Authority

VQA – Vocational Qualifications Authority

VQF – Vocational Qualifications Framework

WHO – World Health Organisation

WWI - Waxbarashadu Waa Iftiin Project

ESA Summary

Introduction to the Summary

Building on the results of the 2016 Education Sector Analysis (ESA), and analysis of the 2012-2016 ESSP, this document comprises an ESA Synthesis, providing an overview of key findings, lessons, and insights offered by the ESA and ESSP Indicator Analysis. Recommendations and areas of focus moving ahead are succinctly summarised at the end of the section.

Early Childhood Education (ECE)

ECE seeks to promote the holistic cognitive, emotional, social and psycho-motor growth and development of the young child. ECE will aim to foster the holistic development of children in an environment in which children feel secure, are stimulated and have opportunities to play, explore and develop.

ECE is offered to children in the 3-5 age brackets. The focus of ECE is on stimulating and developing the cognitive, affective and psycho-motor skills of the young child and his/her holistic development: Early Childhood Education should be fun. ECE also seeks to prepare children for formal schooling and ease the transition from home to primary school.

Strengths and Successes

Awareness surrounding the importance of ECE to childhood development and achievement later in life, and ECE's importance to the development of the education sector, have received increasing attention in Puntland in recent years. ESC partners, local communities, and the MoE&HE have all taken steps in recent years toward growing the sector, improving access, and raising standards.

Challenges

The JRES, action plan, and evaluation documents all indicated this sector remains under-studied and under-developed, with limited data held by either the Ministry of Education, or education partners. Furthermore, many plans appear to have been made to improve understanding, quality, and oversight of the sector, but have not until now been undertaken. It would appear that a lack of resources and capacity, and a focus on primary education, have resulted in lack of desired progress in this subsector.

Recommendations and Moving Ahead

Very little is understood about the sector – prevalence of early childhood care and education centres, modes of delivery, rates of enrolment, quality and content of provision, etc. remain largely outside the view of the MoE&HE and relevant sectors. Prior to making any policy recommendations or taking steps to regulate the sector, it will be necessary to first undertake a study to map the sector and its most common modes of provision. More detailed analyses of the cost vs benefit of MoE&HE involvement in the ECE sector can be undertaken, leading to more detailed sets of recommendations and analyses.

Primary Education

The main objectives of primary education are to introduce the child progressively to the world around them and to lay a solid foundation for future learning. Primary education will:

- ❖ Promote learners' growth and acquisition of spiritual, cultural and intellectual values and adaptive attitudes to life based on Islamic principles and ethics;
- ❖ Inculcate basic literacy, numeracy, and reinforce communicative and manipulative skills and foster the growth of desirable civic qualities of tolerance, respect for others, maintenance of peace and patriotism; and
- ❖ Stimulate learners' desire for knowledge and lay the basis for future/further learning.

Primary school education is generally offered to learners in the 6-14 age brackets. The primary education level is comprised of a four-year, Grade 1-4 elementary cycle and a four-year Grade 5-8, intermediate cycle. The Puntland Primary School Leaving Examination (PSLE) assesses the completion of this stage and determines transition into secondary school.

The government considers Alternative Basic Education (ABE) to comprise a component phase of the Primary Education subsector. In many cases, analyses of Primary Education include the ABE sector; the consultants have undertaken analyses building on this practice, and have sought to provide individual analyses of ABE where appropriate and as the data allows.

Integrated Quranic Schools (IQS)

Qur'anic education forms an important component of Puntland's education sector, with provision including both ECE and primary levels. Seeking to recognise the sector's contribution, the Ministry of Education undertook to bring qur'anic schools into current oversight and administrative mechanisms. As such, qur'anic schools have been integrated into EMIS and other administrative mechanisms, and the Ministry has sought to unify and provide curriculum materials across all relevant schools. Across many government and international organisations' analyses, IQS schools are considered primary schools; as such, the consultants have sought to include IQS schools in primary school analyses, consistent with many governmental and international organisations' practice, providing individual, sector-level analyses where possible.

Strengths and Successes

- ❖ 57.9% Primary GER in 2016 (up from 41% in 2011);
- ❖ Results from primary data suggest that IDPs appear to be relatively well represented in primary education – 7.8% of students at visited schools were reported to be IDPs, as compared to an estimated 6% of Puntland's population;
- ❖ Provision in the primary sector is shifting away from project-focussed EiE provision, and toward long-term and sustainable models of provision;
- ❖ While an enrolment gap between boys and girls exists, it has not grown substantively (ratio was 56% male and 44% female in 2013 and 2016); new enrolments of boys and girls appear to be growing at approximately the same rate;
- ❖ Boys' and girls' achievement was found to be relatively equal at the primary level;
- ❖ Primary enrolment grew from 91,451 in 2011 to 138,651 in 2016;
- ❖ Average national pupil-teacher ratios remained within reasonable levels (growing from 28:1-35:1 between 2013 and 2016); however, substantial regional differences were discovered;
- ❖ Transition rates from grade-to-grade were consistent and the rate of grade repetition between 2013 and 2016 was low; and
- ❖ EMIS data is tracking a range of data points from schools across Puntland, facilitating evidence-based decision-making.

Challenges

- ❖ Male-female enrolment ratios are still not completely equal (56% male; 44% female). In particular, when looking at the ABE subsector, female enrolment went from 55% to 48% and this is almost all due to a decrease in female enrolment in the areas of Nugal and Sanag;
- ❖ Teacher pay remains low, with rural teachers making as little as \$20-\$50 USD per month on average;
- ❖ Urban-rural disparities in education access and achievement persist; in the areas for which UNFPA data exists, 58.5% of the population are rural; however, they form only 50.2% of primary enrolment;
- ❖ Recent endeavours within the primary sector appear to have emphasized improvements in access without achieving much impact on quality; challenges in educational quality were apparent throughout the sector;
- ❖ In 2016, 40% of primary teachers were unqualified;
- ❖ Across the sector, observed quality of instruction remained below minimum standards of practice with the average mark being 2.5, posing concerns about quality of instruction in primary schools;
- ❖ Primary teachers, on average, were unable to pass a GTEC Somali examination – average mark across Puntland was 66%; the same examination all primary teachers are expected to pass prior to receipt of a primary teacher’s certificate (Somali instruction focus);
- ❖ In the Basic Literacy Examinations, the pupils were behind in letter identification (3-4 years), sounding out unfamiliar words (1-2 years) and reading comprehension (3-4 years);
- ❖ 2014 MLA Study results for Literacy show that around 30% pupils may be functionally illiterate – please note these findings emerge from a study undertaken largely in urban areas, and may not be representative of Puntland as a whole;
- ❖ In the Basic Numeracy Examinations, the pupils were competent at counting but behind in reading numbers (3+ years), comparing numbers (2+ years), addition (2+ years), subtraction (4 years), multiplication (1-2 years), and division (3 years);
- ❖ 2014 MLA Study results for Mathematics show 99.8% of all Year 7 students scoring less than 60% and 91.8% scoring less than 40% (which is the government standard);
- ❖ In the more challenging assessments, such as the MLA, boys outperformed girls and urban pupils outperformed rural pupils;
- ❖ Pupils were at least three years behind their international counterparts in literacy and mathematics achievement; one study found that c.30% of year 7 primary pupils were functionally illiterate and/or innumerate;
- ❖ Challenges within numeracy achievement were particularly apparent at the upper primary level;
- ❖ Given such widespread challenges in literacy and numeracy, the validity and appropriateness of examinations and national certificates have been called into question; if 30% of students cannot read or do basic maths, a 96% primary pass rate is questionable;
- ❖ Urban rural disparities in achievement, teacher quality, pupil-teacher ratios, and resource availability were particularly wide; differences become particularly pronounced at the upper-primary level;
- ❖ The WWI Needs Assessment shows standards were not met with respect to temperature, TPR, average PLR and handwashing facilities;
- ❖ Standard of primary education facilities remained poor in many contexts, and up to 67% of primary classrooms do not have any teaching and learning materials;

- ❖ A number of areas remain unrecorded in EMIS data, data points which could prove helpful in undertaking evidence-based planning; and
- ❖ There is limited data on the equity and access afforded to other marginalised or disadvantaged groups and the data collected thus far within EMIS is insufficient for detailed analysis.

Non-Formal Education (NFE)

The objective of this component is to provide a relevant alternative curriculum for primary and secondary education to improve the quality of complementary and NFE-based programmes for children, youth, and adults who are not able, due to special and difficult circumstances, to follow the formal schools and to develop Life, Numeracy and Literacy skills. Non-formal education comprises four levels of study.

Strengths and Successes

- ❖ NFE data is tracked in EMIS systems, facilitating evidence-based decision-making about the sector;
- ❖ Women in particular seem to be taking advantage of NFE provision, comprising 79% of all those enrolled in the sector;
- ❖ NFE enrolment is particularly high in rural contexts, which goes some way toward addressing shortfalls in primary enrolment; 58.5% of students are rural and they access 78.67% of NFE;
- ❖ Pupil-teacher ratios remained relatively low (35:1 in 2016), though some regional variation was documented; and
- ❖ A relatively high percentage of teachers are qualified (48.2%) and 45% have some post-secondary education (WII).

Challenges

- ❖ NFE enrolment declined to 15,097 in 2016 from 17,968 in 2015;
- ❖ Men do not appear to be accessing NFE at the same rate as women; studies have been recommended into the reasons behind this disparity, but none have yet been undertaken;
- ❖ IDPs comprised 5% of students in visited schools, short of the total 6% of Puntland's population they are thought to form;
- ❖ Quality of instruction, in all regions except Karkar, was below minimum standards, indicating challenges in quality of provision;
- ❖ The NFE sector appears to rely quite heavily on volunteer teachers, which may be resulting in high turnover and low quality of teaching staff;
- ❖ Up to 96% of NFE teachers report that classrooms have no or inadequate teaching and learning materials;
- ❖ NFE instructors were asked to take a short Somali language examination, with the average teacher failing the examination; limited subject knowledge poses some challenges to quality of instruction in the sector;
- ❖ It is thought that the wide majority of NFE teachers are untrained, though hard statistics were unavailable on this point;
- ❖ On the Basic Literacy Examinations, pupils are behind on letter identification (4-5 years), invented word (2-3 years) and comprehension (1-2 years);
- ❖ On the Basic Numeracy Examinations, pupils are behind in addition (1+ years), subtraction (1+ years), multiplication (1+ years) and division (1+ years);

- ❖ NFE students performed rather poorly on literacy and numeracy assessments. It appears students are being graduated from one level to the next without meeting minimum attainment standards; numeracy achievement was identified as a particular challenge;
- ❖ Standards of facilities were particularly poor in the NFE sector with a summary score of 2, with many classes situated in informal facilities;
- ❖ There is limited data on the equity and access afforded to other marginalised or disadvantaged groups and the collected thus far within EMIS is insufficient for detailed analysis; and
- ❖ The sample size is limited for NFE which makes it hard to draw conclusions within sub-populations.

Secondary Education

Secondary education in Puntland seeks to accomplish the following:

- ❖ Facilitate all-round development of students spiritually, mentally, culturally and morally according to the norms and principles of Islam, so that they can make positive contributions to the development of society;
- ❖ Equip learners with appropriate skills and attitudes to enable them to achieve a better understanding of the world around them, realize their full potential, appreciate education, develop critical thinking and problem solving abilities, and encourage innovativeness; and
- ❖ Promote positive attitudes and cohesion related to patriotism, co-operation and adaptability, and develop the knowledge base for students' access to tertiary education within Puntland and abroad.

Secondary school is intended for students from age 14-18, comprising four years (or forms) of study. Secondary education seeks to prepare students for university-level study.

Strengths and Successes

- ❖ Secondary enrolment grew by 23.5% between 2013 and 2016, indicating rapid expansion in the sector;
- ❖ The gap in male-female enrolment grew by 5% between 2014 and 2015, but has declined by 1% in the last year, indicating female secondary enrolment may be increasing relative to their male counterparts.
- ❖ The EMIS reported pupil-teacher ratio was relatively low in 2016, though there are some indications that the ratio may have reached up to 27:1 in the last year due to rapidly expanding enrolment;
- ❖ Boys and girls appear to be achieving at relatively similar levels; and

Challenges

- ❖ Overall enrolment in the secondary sector remains low; 14.73% GER (18.12% male; 11.09% female);
- ❖ It appears IDPs and other disadvantaged groups are not accessing secondary education at high rates;
- ❖ There is a substantial urban-rural divide in secondary enrolment;
- ❖ 74%-91% of secondary classrooms have no or insufficient teaching and learning materials;
- ❖ Standards of facilities remain relatively poor within secondary schools;

- ❖ Recent mandates by the government that English be the medium of instruction appear to have had limited impact at the classroom level; one report indicated an average mark of 25% among tested secondary school teachers; and
- ❖ 34.8% of secondary teachers are qualified.

Higher Education Institutions

There are a number of higher education institutions in Puntland, offering a range of diploma, certificate, bachelor's, master's and PhD programmes. The duration, focus, and requirements of each programme are highly dependent on each university. A Higher Education Act was recently passed by the Puntland parliament, seeking to give the central government more control over certificates and practices within the sector; however, this process has only recently begun, with relevant regulatory institutions not yet fully established.

Strengths and Successes

- ❖ Observed quality of teaching was above minimum standards of pedagogical practice;
- ❖ The standard of facilities was better than other subsectors, which may result from high-resourced students attending them;
- ❖ Enrolment in HEI has increased 17.4% in the last since 2013 years, greatly improving access to the sector; and
- ❖ The Higher Education act is currently being finalised, which will create a national body for approving accreditation of relevant degree programmes.

Challenges

- ❖ Women face challenges in standards of equity and access in higher education;
- ❖ Fees may not yet be affordable for all students in the country;
- ❖ Some delays in capacity development, namely through the passage of the Higher Education Act and establishment of the Higher Education Commission, may be slowing MoE&HE capacity to oversee the sector; and
- ❖ EMIS does not yet record all relevant information about the sector.

Technical and Vocational Education and Training

TVET in Puntland remains largely project-driven, with NGOs providing short training courses to target beneficiary groups. While some limited centre-based provision does appear to exist, the TVET sector remains largely undeveloped, with no substantive national qualifications scheme. The government of Puntland, similarly, has limited regulatory or oversight capacity of the sector.

Strengths and Successes

- ❖ IDPs appeared to be relatively well-represented within the TVET sector;
- ❖ Women appeared to be relatively well represented;
- ❖ Relatively low pupil-teacher ratio; and
- ❖ All available data points to high rates of TVET graduate employment (c. 70-80 %).

Challenges

- ❖ Observed quality of instruction was below minimum standards;

- ❖ Widespread inequities in access for rural communities, as 100% of TVET institutions are in urban areas;
- ❖ Standard of facilities was below minimum; and
- ❖ The TVET sector remains largely outside the supervision of the government, with limited oversight and QA input. As such, it is unclear whether the degree to which the qualifications and programmes currently being offered are relevant to the employment market; however, a labour market survey undertaken by MoE&HE along with ESC partners offers some encouraging indications as to the relevance of TVET training, and its appropriateness to market requirements.

Pastoralist Education and ABE

Pastoralists and nomads comprise a substantial percentage of the population of Puntland. Given the transient nature of their communities, only broad indications of enrolment rates have been identified by Ministry officials in interviews or in existing studies. Available data would appear to indicate that pastoralist communities remain a large and underserved segment of Puntland's population.

Strengths and Successes

Several programmes in recent years, most notably the Flexible Approach to Basic Education (FABE) and other similar initiatives have achieved success in smaller-scale undertakings; the lessons learned from these projects have informed development of future pastoralist-focussed provision by both the government and international organisations. To this end the MoE&HE and partners have planned a range of new initiatives in their pastoralist education strategy, with core areas of focus comprising:

- ❖ Construction of new schools and education facilities in communities and areas frequented by pastoralists and nomads;
- ❖ Development of 'mobile schools', travelling with pastoralists and nomads;
- ❖ Provision of boarding facilities for secondary students;
- ❖ Training of teachers from pastoralist and nomadic communities, ensuring teachers are comfortable and familiar with nomadism, reducing teacher turnover; and
- ❖ Development of 'radio education' content and programmes, allowing nomads and pastoralists to learn even if a teacher remains unavailable.

Challenges

The Puntland MoE&HE has identified a number of specific challenges facing pastoralist participation in the education sector; these have formed the primary focus of Ministry policy and planning in the pastoralist education space for the coming years.

Socio-Economic and Cultural Problems

- ❖ The long period of marginalisation the pastoralist areas suffered in the past years, which was more acute than what was experienced by the other parts of the country;
- ❖ The down-trodden economic status of pastoralists that is mainly based on backward animal rearing practices and severely limits their capacity to support the education system financially and materially;
- ❖ The deterrent impact of mobility and low density of population that has made the building of infrastructures and social services (road, water, health, education, etc.) difficult and the consequent inability of addressing the educational needs of pastoralists through formal schools alone and high dropout rate of children, particularly girls, due to school distance;

- ❖ Low level of awareness on the importance of education and reluctance to send girls to school on the part of pastoralists that stem from a deep-rooted backward mind-set and harmful traditional practices;
- ❖ Occasional conflicts among different clans that arise from scarcity of pasture and water, and the subsequent displacement of families and dropping-out of school on the part of pupils;
- ❖ The vulnerability of pastoralist areas to repeated drought and food shortage which in turn forces pupils to drop-out of school in many areas where the problem is acute and a school feeding program is not put in place; and
- ❖ The demand for child labour in the various economic activities of the family and household chores.

Human Resource Development Problems

- ❖ Capacity problem on the part of the majority of officials and professionals at various levels of the regional education structure to execute their respective jobs efficiently;
- ❖ High turn-over of officials;
- ❖ Shortage of qualified manpower at regional, district and school levels;
- ❖ Improper utilisation of scarce regional resources;
- ❖ Weak supervision, planning, monitoring and evaluation system, and training deficiencies on the part of the professionals assigned for the activities;
- ❖ Shortage of teachers and unsatisfactory level of commitment on the part of teachers who are currently serving;
- ❖ Few teachers willing to live in the hard conditions found in these areas, resulting in teacher shortages as well as poorly motivated teachers; and
- ❖ Absence of incentives that could be instrumental to employ teachers and other professionals in sufficient number and retain them in their work for a sufficiently long period of time.

Problems to Educational Management at Different Levels

- ❖ Minimal focus on the part of management bodies at regional and district levels to give due attention to the education sector in general and ABE in particular;
- ❖ Seek solutions to the problems of the sector on the basis of feedbacks obtained through monitoring and evaluation;
- ❖ Minimal coordination and joint planning of concerned stakeholders in the special support offered by the Ministry of Education and Higher Education to pastoralist areas and the need to do more to strengthen the level of Coordination attained at present;
- ❖ Efficiency of capacity on the part of educational management bodies at various levels to mobilize the community for the development of the education sector;
- ❖ The extremely insignificant representation of female in educational management positions;
- ❖ Problems to quality and relevance of education;
- ❖ Absence of variety of educational delivery modes that are compatible with the way of life of pastoralists;
- ❖ Failure of the curricula designed for pastoralists to take into account their socio-economic and cultural realities;
- ❖ Low quality of teaching-learning materials produced for primary education;
- ❖ Capacity challenges in delivering at least the first cycle of primary education (Grades 1-4); and
- ❖ Acute shortage of teaching-learning materials and teaching aids in primary schools in pastoralist areas.

Administration and Management

As Puntland transitions from emergency-based to more sustainable models of educational provision, it is thought that social and economic policies and programs will be increasingly prioritized by decision-makers in the country. Puntland authorities have recently moved to emphasise socioeconomic development, evidenced by the planned increases in budgetary allocation for the education sector, which went from 3.5 percent to 7.14 percent in 2016. As funding and capacity continue to increase, more successes and achievements are expected from the MoE&HE and education partners in the coming years.

Successes and Achievements

- ❖ The QAS department has developed quality assurance documents, policies and strategies which appear to be in the process of implementation. It appears that some training for staff on use and deployment of relevant tools has been undertaken;
- ❖ The Puntland National Examinations Board (PNEB) appears to have the capacity to set and mark several subsectors' exams and certificates across Puntland;
- ❖ The Policy and Planning department appears to have improved its capacity substantially in recent years, facilitating the development of a range of policy documents;
- ❖ The EMIS system has been developed and deployed across a range of useful measures. The data generated by this system appears to be informing evidence-based planning by the ministry, though some improvements in this regard may be required;
- ❖ The gender unit appears to have had some success improving female access to education, and has seen substantial growth in capacity in recent years;
- ❖ DHE recently passed the relevant legal framework (the Higher Education Act) that defined its roles and responsibilities. Relevant bodies and responsibilities are still being developed, given the recentness of the Act's passage;
- ❖ Examinations and certifications development and deployment may offer substantial benefits in the coming years; and
- ❖ The ministry as a whole appears to have grown substantially in recent years, with great strides achieved in capacity development, policy planning, and expanding educational access to many in the country.

Challenges

- ❖ There is irregular quality assurance and standards monitoring services (through QAS department) especially in rural areas. Less frequent curriculum implementation and school administration supervision and monitoring in remote and rural schools. Data collected by QAS officers may not be collated and stored centrally in a way that allows for meaningful, system-level analyses of educational quality;
- ❖ Availability of strong data and systems for the monitoring of relevant data remain substantial challenges;
- ❖ Financial management may be a potential challenge, as there have been some difficulties in providing granular figures documenting total revenue and expenditure across the sector;
- ❖ 12% of schools identified via stakeholder interviews may be operating outside the view of the MoE&HE, indicating a potential need to undertake additional registration activities;
- ❖ Duplication of effort across the education sector, and the various international and domestic actors operating within it, appears to be a challenge;

- ❖ The TVET and Teacher Training departments remain very resource constrained, potentially limiting MoE&HE capacity in these areas;
- ❖ Nepotistic hiring practices may pose a potential challenge in some institutions within the sector;
- ❖ EMIS data could be expanded to include a wider range of indicators and data relating to demographics (e.g. IDP, minority groups), and pupil achievement data;
- ❖ Delays in publication of EMIS data may be hampering accurate evaluation of needs and subsequent decisions within the education sector; and
- ❖ Ministry and ESC targets and policy planning appear to be largely output-oriented (e.g. enrolment figures, and schools built), with limited focus on objective measures of quality (e.g. pupil achievement).

Conclusions, Lessons Learned, and Recommendations

The MoE&HE and partners have made large strides toward enabling wider access to education across a range of groups in the country. The victories are not small, and have been addressed in great detail in the previous synthesis of findings, as well as in the larger ESA and ESSP Indicator Analysis documents submitted as part of this project.

Nonetheless, a number of lessons and challenges should be addressed in the next ESSP; across each sector, many of the challenges faced were rather similar, requiring similar strategies for resolution. As such, it is recommended that the ESSP focus on driving sub-sector-level development and improvement across the following key areas of focus:

Collection, Collation, Management and Oversight of Data; Establishment of Clear and Robust M&E

All education actors within the country, particularly within the ESC, do not yet centrally record relevant expenditure, M&E, and activity information; such practices may be impeding effective coordination of the sector. All actors within the country appear to be implementing disparate standards of provision, M&E, and data collection/recording, and not engaging in a concerted effort to share learning and information with all relevant actors within the country. Similarly, much of the data collected by relevant actors focuses heavily on activity undertaken, rather than impact and outcomes; this is likely impeding understanding of what works within the sector, and how best to drive improved achievement and learning outcomes in Puntland.

As such, one of the first steps involved in the next ESSP should focus heavily on improving the quality of data available, as well as on improving the systems and processes for centrally evaluating provision, and for recording and sharing relevant information.

Strengthening of Compliance Mechanisms

On finalisation of strengthened data collection and M&E mechanisms, concerns relating to compliance and ghost teachers need to be addressed. Such steps have the potential to substantially improve education quality, access, equity, and efficiency. Confidence in the sector and relevant actors to manage this will further improve the willingness of third and private sector actors to further invest in the country's education sector.

Limit Duplication of Inputs	Further to the above, improved sharing and collation of detailed data, particularly as it relates to specific activity undertaken and expenditure will facilitate reduction of duplicated inputs; duplicated inputs were mentioned by many ESC stakeholders as affecting on the efficiency and impact of activity undertaken across the sector. As such, further activity should seek to minimise such duplication in the interest of ‘stretching’ limited resources.
Focus on Quality and Achievement	In many cases, MoE&HE and education sector partners focus on activity, enrolment, training quantities, and other similar measures of the education system as determinates of success. However, as can be seen from some of the challenges discussed in previous sections, these increases in access and activity may not have resulted in improved educational quality and pupil achievement. As such, it will be appropriate to expand future measures of sector improvement and development onto measures of quality and achievement, benchmarked and validated externally against international standards. This will help ensure that expansions in access and equity are not undermined by poor standards of education; such an approach would be the most efficient use of available resources.
Pastoralists and Nomads	<p>Pastoralists and nomads are thought to comprise c. 60 % of Puntland’s population; however, only 5%-15% of these populations are reported as having access to education. To-date, most focus in expanding the capacity of Puntland’s education sector has been on urban areas and stationary communities. If the MoE&HE and education partners are to meet stated targets of promoting wider participation in the education sector, thereby promoting equity and economic development, there is a need to expand relevant provision.</p> <p>Some relevant programming has been planned by the government and other actors; however, it will be important to recall previous recommendations and lessons learned relating to a focus on improvements to educational quality and pupil achievement, not just expansions of activity.</p>
Disadvantaged Groups	Much provision in recent years has focused on improving educational access and equity for girls. However, it appears there is scope for significant expansion of provision for IDPs, pastoralists/nomads, minority groups, and disabled children. Future programming seeking to promote equity and access in the sector will necessarily have to focus on including these individuals; previous lessons relating to a focus on quality and achievement will also be important in any relevant action to this end.
Focus on Efficiency, and Relative Economic Impact	In some cases, the MoE&HE and educational partners seek to expand access across all sectors, and increase the government’s

capacity to oversee/control the sector; however, in some cases existing private sector and independent or non-state actors may be meeting many of the needs of certain communities. These non-state providers comprise a significant portion of education providers in the country, often offering higher standards of provision at lower costs than average schools; these providers should be seen as effective partners within the sector, and the government should seek to collaborate positively with them. It is important that the sector is not overregulated, as substantial capacity and technical challenges can emerge with such an approach.

As such, the MoE&HE and partners should seek to work closely with existing, effective actors within the sector, seeking to complement rather than supplant strong providers and oversight mechanisms within the country; such an approach has the potential to substantially improve outcomes while ensuring limited escalation in costs. Further to this, it is important that the education sector remain open to new entrants, and is not subject to overregulation, except within the areas of child protection, health and safety, and consumer protection.

Introduction

Working with the technical support of Save the Children International, the Ministry of Education and Higher Education of Puntland State of Somalia (MoE&HE) sought to undertake a comprehensive Education Sector Analysis (ESA) for the State of Puntland to develop a five-year Education Sector Strategic Plan (ESSP) and a detailed three-year action plan to support its education initiatives within the region. Given, the state's annual budgetary constraints, especially within the education sector, the education service provision in Puntland is supported by non-state actors, such as community groups, private individuals, and NGOs, with the MoE&HE taking on an increasingly important role in both delivery and oversight of provision. Among these, parents serve as one of the most important financial contributors through school fee payments of approximately \$18 million USD annually (SCI, 2015). Additionally, international organizations such as EU, DFID, GPE, USAID, UN, as well as other smaller organisations such as Muslim Aid UK also serve as important donors and financial supporters within the sector, providing funding for over 250 schools in the region (SCI, 2015). This has permitted the MoE&HE to undertake an increasingly important leadership role through providing oversight and ensuring quality control and coordination.

As such, Save the Children sought to collaborate with the MoE&HE, Education Sector Committee, CSOs, and local stakeholders to develop a participatory, and accurate ESA. Thus, in accordance with these objectives, this section of the report provides details of the methodology and procedures deployed to support the following outcomes:

- ❖ Conducting a comprehensive ESA;
- ❖ Identifying areas of gaps, and providing recommendations for future change;
- ❖ Highlighting the successes and achievements to be built upon;
- ❖ Further recommendations for future innovations and strategies.

It is envisioned that the activities described in this document will lead to successful development of an ESA and five year ESSP for 2017-2021, as well as a detailed three years' (2017-2019) action plan. The assignment has aimed to explore methods for improving local ownership and capacity building for the future sustainability of provision and action of the MoE&HE and the wider education sector. Consequently, researchers have worked closely with the MoE&HE, education sector committee, Ministry of Finance (MoF), the Ministry of Planning and International Cooperation (MoPIC) and aother key stakeholders to develop a suitable ESA and ESSP based on robust data, analysis, and resulting findings. The following sections provide complete details as to the planned methods and instruments for achieving these ends.

Areas of Focus

In the interest of achieving an effective Education Sector Analysis, several Areas of Focus informed research activities. These Areas of Focus have been developed through careful review of the previous ESSP project Terms of Reference and review of relevant literature, data, reports, and studies, to ensure an in-depth overview of Puntland's current and future educational provision and needs. A detailed explanation of each of these Areas of Focus, and brief rationales for their inclusion, can be found in the table below:

Table 1 - Areas of Focus

<p>1 Context: Mapping Current Provision</p>	<p>Given that educational provision in Puntland is largely decentralised, with the MoE&HE not completely responsible for oversight and/or management of all provision in the region, it may be the case that some provision has not yet been completely documented. It is also possible that new provision has been implemented since the last round of data collection. As such, the first Area of Focus will be mapping and documentation of all current provision (State, NGO/Charity, Community, and Private), and collection of relevant data from knowledgeable stakeholders, as far as is possible.</p>
<p>2 Context: Demographic</p>	
<p>3 Context: Humanitarian</p>	
<p>4 Context: Socio-economic</p>	
<p>5 Context: Political</p>	<p>The demographic, humanitarian, socio-economic and political development contexts, as well as governments commitment, have a critical and direct impact on education policy given that they determine both the number of children to enrol and the social constraints the education system faces. By identifying related challenges, an effective strategy for confronting them can begin to take shape.</p>
<p>6 Context: Government Commitment</p>	
<p>7 Context: Other</p>	

<p>8 Finance</p>	<p>The analysis of a state’s macroeconomics and public finance enables the estimation of past public expenditure, and the resources allocated to education in particular, as well as those likely to be available in the future. The consultants will further examine financing trends since the previous ESSP and relevant sector analyses/research to identify whether funding has kept pace with increases in enrolment.</p>
<p>9 Access</p>	<p>This area of focus will seek to establish: Who goes and who doesn’t go to school and for what reason, and what the ratio of male to female students is in schools. Analysis will include data on marginalized groups: children with disabilities, children from minority clans, IDPs, Pastoralist, working children, and so on. By identifying trends and challenges in Access, solutions to common issues can begin to be addressed by the ESSP.</p>
<p>10 Efficiency</p>	<p>This area of focus is primarily concerned with the following: Are students completing the primary cycle? How many repeat? How many drop out? What is the cost of education per pupil, what is the impact for that expenditure, and what interventions and strategies can begin to address challenges in efficiency?</p>
<p>11 Equity</p>	<p>This area of focus is primarily concerned with: enrolment and pupil achievement, and the distribution of public resources across Puntland’s various demographic groups. It asks question such as: is there equal opportunity to participate in schooling? Are conditions similar for all pupils? Once these questions are answered, strategies can be developed to address the identified challenges and concerns.</p>
<p>12 Quality</p>	<p>This area of focus is primarily concerned with identifying what factors within the education system are impacting on pupil performance, and what can be done to raise pupil achievement through improvements to the education system.</p>
<p>13 Capacity: Actual Teacher Pay, Enrolment, Attendance</p>	<p>Through resolving questions relating to actual teacher pay, actual pupil enrolment, and actual teacher and pupil attendance at schools, a clearer picture of the economic efficiency of the education sector can be established. Once these real pictures of efficiency and cost take shape, strategies for improving performance across these measures can be designed and implemented, with the intent of ‘stretching’ existing resources.</p>

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| <p>14 Capacity: Actual Materials</p> | <p>Similar to the above area of focus, it will be necessary to establish what resources and materials are actually in schools – given that resources can have a substantial impact on pupil learning outcomes and achievement – as real availability can frequently differ from reported availability of resources within low-resource contexts like Puntland.</p> |
| <p>16 Capacity: Fees and Funding Sources</p> | <p>It will be necessary to identify and quantify all sources of revenue and funding for schools and the wider education sector – as possible – in order to plan future provision, and allocate resources appropriately and efficiently. Without an accurate view of all funding sources, not just those coming from the government or large major donors, inefficient, and potentially damaging, use of resources is a risk.</p> |
| <p>17 Capacity: Potential Role of MoE&HE</p> | <p>The potential role of the MoE&HE in Puntland’s education sector will be important, as will understanding the degree to which stakeholders in the sector are willing to collaborate with the Ministry. Similarly, it will be important to establish where the Ministry may not be needed – if there are providers or models of provision which are achieving excellent and equitable standards of education, the ministry may be able to dedicate its limited resources elsewhere, thereby promoting efficiency and greater impact within the sector.</p> |
| <p>18 Capacity: Use of Management Systems</p> | <p>The degree to which such systems are used, and their effectiveness, will be important to establish, whether with the intent of identifying alternative models, or promoting best practices. Effective management systems are the key to success for national education sectors, and have been provided substantial attention in this study. While part of the broader MoE&HE analysis, it is important to undertake a granular analysis of relevant systems and their capacity to manage the sector; effective systems have substantial impact on organisations’ capabilities.</p> |
| <p>19 Capacity: HR, Capability, Qualification, Training</p> | <p>The qualifications and capability of staff are important drivers of educational quality. The instruments will therefore seek to establish the standard of Human Resources within Puntland’s education sector, and how those might be improved or more effectively utilised. Once again, specific analyses of these areas seek to explicitly address human capacity, and create a set of targets for improvement; systems and institutions are only as good as the people managing them.</p> |

20 Risks

It will be important to evaluate risks related to natural disasters, conflicts, political commitment, predictability of funding and capacity constraints etc. and their impact on the education system. The Researchers will further seek to identify potential mitigation and remediation strategies throughout the course of interaction with stakeholders, drawing heavily on local expertise and knowledge.

21 General Change

This Area of Focus will seek to focus on general areas of change within the education sector not covered by other sections, as well as provide a space for Researchers to explore topics and ideas in an unstructured format, allowing a degree of freedom to delve into ideas and themes not explicitly covered by the instruments.

22 Transparency

Issues relating to transparency and corruption have substantial potential to impact on the provision of education within Puntland. As such, the researchers will undertake to map issues and concerns relating to transparency and compliance, and their real impacts on the sector.

Instrument Overview

The selected instruments were designed to collect stakeholder-specific data, while allowing for comparability of collected data across the various instruments and stakeholder groups (Bell, 2010, pp. 140-141) (Denscombe, 2010, pp. 155-156). For reference, the specific instruments designed for the purposes of this study, and the stakeholder categories they will seek to collect data from, comprise the following:

Table 2 - Instrument Overview

Literature Review

The literature review served a primary role in structuring research activities and analyses, as well as provided a wealth of data on interventions and strategies undertaken in relevant developing contexts (Denscombe, 2010, p. 216) (Bell, 2010, p. 124). Particular attention was paid to studies and papers providing insight into methods of assessing educational systems, as well as into interventions and structures for the improvement of access, equity, and quality in national and local education systems; work providing special insight into fragile and in-conflict contexts were particularly important (*ibid.*).

Review of Existing Data

A wide range of studies have already been undertaken within Puntland in recent years – the Consultants have participated in several – and there already exists a wealth of data in the EMIS and related data management systems in the state. This wealth of data, once appropriately benchmarked (see later sections on sampling strategy), can greatly improve the scope, depth, and quality of analyses, with minimal additional effort of collection (Denscombe, 2010, pp. 221-226) (Bell, 2010, p. 124). As such, they have formed one of the primary focuses of the Research Team for collection and later analyses.

Furthermore, in decentralised systems of education (like Puntland's), data may not be centrally managed (Barakat, Chard, Jacoby, & Lume, 2002) (Vlassenroot, 2006) (Cohen & Arieli, 2011), with some data effectively 'compartmentalised' to one area, division, organisation, or person; in the interest of actively discovering and collecting potentially compartmentalised data, the Research Team has included an array of questions within other instruments (namely KIIs) to solicit additional data relating to a wide range of areas of focus in this study. In this way, additional, previously 'undiscovered' data can be systematically collected with a relatively high degree of consistency, further strengthening findings.

School Data Form

The School Data Form was completed by Enumerators and Researchers in collaboration with Head Teachers or other relevant

School Leaders. It sought to establish basic information – benchmarking and adjusting EMIS and related data – on school populations, teacher populations, facilities, and other related quantitative data.

A separate section of this form is to be completed independently by Researchers, focussing on areas that need to be objectively verified by someone without a potential conflict of interest; this data largely comprises figures on teacher attendance and performance, pupil attendance, availability of resources and materials, standard of facilities, and other quantitative points of data requiring independent and objective evaluation.

High-Level Stakeholder Key Informant Interview (KII)

This instrument seeks to collect data from stakeholders whose insight into Puntland’s education sector is considered ‘higher level’; that is to say their view and level of insight extends beyond the day-to-day management of a single school or educational institution. The specific stakeholders covered by this instrument comprise:

- ❖ Ministry Officials;
- ❖ Government Appointees;
- ❖ Donor representatives;
- ❖ Partner representatives;
- ❖ Education Sector Committee Members;
- ❖ NGO staff (not managers of specific schools/colleges/institutions);
- ❖ Project managers;
- ❖ Other relevant high-level stakeholders.

A KII was considered the most appropriate format for collecting data from these stakeholders, as they are likely to be busy, with varied availabilities; getting multiple such stakeholders into one room at the same time for a focus group discussion often proves to be exceedingly challenging, or costly, given such stakeholders can frequently expect per diems or related payments for participation.

Furthermore, many of the questions asked were sensitive in nature, and undertaking data collection in FGD format may lead to intended respondents being less forthcoming than in more anonymous one-on-one formats. Similarly, the depth of data collection and discussion achieved in KIIs is often superior to the FGD format.

Additional space has been provided at the end of this instrument for Researchers to undertake unstructured interviews, allowing them the flexibility to expand on areas of interest identified during the KII.

**Community Education
Committee (CEC)
Focus Group
Discussion (FGD)**

FGDs with CEC members have been undertaken by the Research Team previously, and given that such groups are generally accustomed to meeting, with a relatively regular meeting schedule, it was thought to be more efficient to collect data from these stakeholders in a FGD. The insight they are thought to offer is largely qualitative in nature, further indicating that the FGD format is well suited to this group of stakeholders.

Additional space was provided at the end of this instrument for Researchers to undertake unstructured interviews, allowing them the flexibility to expand on areas of interest identified during the FGDs

**School Leader and
Teacher KII**

Many of the School Leader and Head Teacher-specific questions are resolved in the School Data Form (for which Researchers will liaise directly with relevant Leadership); many of the remaining lines of questioning overlap with what is asked of teachers. As such, it was considered appropriate to create one combined instrument for both Teachers and School Leaders.

School leaders are defined as Head Teachers / Principals, Deputy Head Teachers / Deputy Principals, or Heads of Department, holding substantial responsibility for management and leadership within schools, members of school governing bodies, or school owners.

Similar to the High-Level Stakeholder KII, teachers frequently have busy and dynamic schedules, with different free periods throughout the day. Furthermore, many of the questions to be asked are sensitive in nature, and undertaking data collection in FGD format may lead to intended respondents being less forthcoming than in more anonymous one-on-one formats. As such, KIIs were selected for this group of intended respondents.

Additional space was provided at the end of this instrument for Researchers to undertake unstructured interviews, allowing them the flexibility to expand on areas of interest identified during the KII.

Children KII

One single instrument for Children in School and Children Out of School was created; the lines of questioning specific to Children in School were be generated (or skipped) through the use of 'skip tools' or conditional questioning tools in the data collection software to be used by Researchers.

Similar to the High-Level Stakeholder KII and the Teacher KII,

many of the questions asked were sensitive in nature, and undertaking data collection in FGD format may lead to intended respondents being less forthcoming than in more anonymous one-on-one formats. As such, KIIs were selected for Children.

Additional space was provided at the end of this instrument for Researchers to undertake unstructured interviews, allowing them the flexibility to expand on areas of interest identified during the KII.

Parents KII

One single instrument for Parents with Children in School and Parents with Children Out of School was created; the lines of questioning specific to Parents with Children in School will be generated (or skipped) through the use of 'skip tools' or conditional questioning tools in the data collection software to be used by researchers.

Similar to the High-Level Stakeholder KII and the Teacher KII, Parents can frequently be a challenge to collect into groups for FGDs, given that many have busy schedules, or may commit to returning for a FGD and then not follow through; the KII format allows Researchers to collect data from parents quickly when they arrive at the school, without having to make complicated or ill-fated logistical arrangements. Furthermore, many of the questions asked were sensitive in nature, and undertaking data collection in FGD format may lead to intended respondents being less forthcoming than in more anonymous one-on-one formats. As such, KIIs were selected for Parents.

Additional space was provided at the end of this instrument for Researchers to undertake unstructured interviews, allowing them the flexibility to expand on areas of interest identified during the KII.

Lesson Observation Form

Many of the Areas of Focus of this study seek to evaluate educational quality. However, self-reported measures of quality are frequently poor measures of true quality (Ross, 2006), and must in all cases be approached with a degree of caution. As such, researchers utilised a Lesson Observation Form, drawing from a wide body of literature on what makes teachers effective as measured by improved pupil learning outcomes (Ko, Sammons, & Bakkum, 2013). Researchers have used similar forms within relevant contexts to evaluate the quality of instruction; the tools have proven to be a valuable resource in quantifying the quality of instruction. The Lesson Observation Form also includes selected other prompts to collect quantitative data to benchmark EMIS and

related data – namely class attendance, gender ratios, classroom sizes, availability of materials, etc. Collecting this data within the lesson observation form helps promote efficiency of data collection.

Literacy and numeracy assessments for pupils

Seeking to overcome previously-discussed challenges in self-reported educational quality, and the need to benchmark EMIS data, the literacy and numeracy achievement of pupils is thought to be an important corollary of educational quality (Kyriakides & Creemers, 2011). As such, Researchers undertook literacy and numeracy assessments with a selected number of pupils at each school within relevant levels of education. These assessments are thought to comprise one or all of the following:

- ❖ The Early Grade Reading Assessment (EGRA)
- ❖ A basic numeracy assessment.

The EGRA is a tool that has been used to great success in previous research in Puntland. Many Somali-language versions exist, and will be easy to implement. However, the EGRA is appropriate only for earlier grades, and if effective measures of literacy are to be achieved at higher levels of education, a test offering a broader spectrum and richer set of results. These two tests will be undertaken in tandem where appropriate, in the interest of providing opportunities for triangulation and benchmarking of data (Chan, 2009) (Denscombe, 2010, p. 346) (Bourbonnais, Meyer, & Theriault, 1988).

The numeracy assessment draws heavily on the Uwezo Kenya National Learning Assessment for numeracy, which can be given to children between the ages of 6 and 16, effectively grading levels of achievement for pupils (Uwezo, 2015). The assessment has been successfully implemented in neighbouring Kenya, including within low resource and developing contexts, and as such might be considered a useful tool for implementation in this study.

The consultants have additionally use the AET study: ‘Measuring Learning Achievements in Grade 7’, drawing findings and data where appropriate.

These assessments were translated into Somali, as appropriate.

Literacy assessments for teachers

Given that research has established teacher subject knowledge to be one of the primary determinants of educational quality (Ko, Sammons, & Bakkum, 2013), teachers were given a simple subject knowledge assessment. These comprised simple Somali-language tests provided by GTEC; the same tests any teacher wishing to graduate with a diploma in Primary teaching is required to pass. 3-5

teachers at each Primary and Secondary school were asked to complete the assessment. Indicative assessment questions can be found on page 83.

A Somali language examination, set at minimum knowledge standards of Primary teachers, was used as a measure of academic standing across all teachers in all subjects; Somali, even in cases where English is the stated primary language of instruction, is often used to deliver lessons; if a teacher is unable to effectively communicate and write in Somali, a basic prerequisite for communicating subject knowledge in any subject, their teaching effectiveness in any subject will likely be impacted. As such, this stands as a base indicator for minimum teacher competence and academic credentials across teachers of all subjects at the primary, secondary, and NFE levels.

Education provision mapping tool

To validate whether all schools in Puntland are registered with the government, a tool was developed to identify whether any schools within targeted communities were not registered with the government.

It is thought this tool will be important to validate capacity, and ensure that all schools in the state receive adequate study and inclusion.

Sampling & Benchmarking Strategy

Sampling Strategy

A detailed sampling strategy was developed, with the intent of documenting all of Puntland's education system, not just that which has been documented and regulated by the Ministry of Education and Higher Studies, as far as is possible. However, given extant challenges in Puntland, a flexible approach to sampling was required (Barakat, Chard, Jacoby, & Lume, 2002) (Vlassenroot, 2006) (Cohen & Arieli, 2011). A complete overview of samples achieved across each instrument can be found in the following sections.

Benchmarking

To strengthen analyses, pre-existing data will be used alongside primary in analyses of the education system in Puntland. This is largely thought to include EMIS data, and that collected by other researchers. In the interest of ensuring accuracy of this secondary data, the data collection team will use primary data to benchmark and adjust secondary data, primarily with regard to figures on teacher and pupil attendance and enrolment, as well as in pupil performance in examinations, though other figures may be benchmarked and adjusted as appropriate.

Cascading Collection

In the interest of promoting efficiency of data collection, a cascaded model will be adopted. As such, data collection will begin with High-Level Stakeholders being contacted first, by Skype or Telephone as possible, in the interest of making the most of researchers' in-country time. Furthermore, it is thought that high-level stakeholders might have data, contacts, or other information that can help structure and guide later data collection, further promoting efficiency in data collection activities. From there, researchers will implement plans for individual school and community visits, endeavouring to structure activities so that multiple data collection activities can be undertaken in parallel within each school and/or community.

ESA Activity Undertaken

Overview of Collected Data

The consultants collaborated with a MoE&HE data collection team, seeking to build MoE&HE capacity to undertake large-scale data collection exercises. Teams were deployed across Puntland to collect data from pre-selected schools, with the intent of collecting a representative sample of data from Puntland's education sector.

Schools/Institutions Visited

Table 4 - Schools/Institutions Visited

	HEI	NFE / ABE	Primary	Secondary	TVET
Ayn		3	4	2	
Bari	4	1	6	2	
Hayland		2	2	1	
Karkaar		2	11	1	1
Mudug		1	11	2	1
Nugal		1	13	2	3
Sanag			8	1	
Sool		2	7		
Grand Total	4	12	62	11	5
TOTAL INSTITUTIONS: 94					

Data collection teams visited a total of 94 schools / institutions. Schools / institutions were selected to be representative of the type and quantity of all schools in Puntland.

It was determined that, given available resources, 80 schools were an appropriate target institution sample; this was a 'pragmatic' sampling strategy, given that it was not possible to undertake a truly representative sample with available resources. Nonetheless, a substantial percentage of the Puntland's educational institutions were visited.

In the interest of ensuring minimum targets were met, the consultants chose a sample of institutions above the minimum 80 (in this case 100), and proportionally allocated the target sample according to the percentage of all educational institutions that level of education comprised (e.g. Primary school comprised c. 68% of the educational institutions in the county; teams were asked to collect data from c. 68 such institutions). The consultants then

allocated institutions according to population percentages and the urban/rural divide, ensuring institutions visited were representative of the population distributions across Puntland's various regions and urban/rural zones. A random selection of schools was undertaken within each category using a random number generator, seeking to limit biases in sample selection.

The urban/rural split of schools visited can be found below:

Table 5 - Rural / Urban Schools Visited

	Frequency			Frequency	
	Rural	Urban		Rural	Urban
HEI		4	Secondary	5	6
Bari		4	Ayn		2

NFE	8	4	Bari		2
Ayn		3	Hayland	1	
Bari	1		Karkaar		1
Hayland	2		Mudug	2	
Karkaar	1	1	Nugal	2	
Mudug	1		Sanag		1
Nugal	1		TVET	1	4
Sool	2		Karkaar		1
Hayland	2		Mudug	1	
Primary	34	28	Nugal		3
Ayn	3	1			
Bari	2	4			
Hayland	1	1			
Karkaar	6	5			
Mudug	5	6			
Nugal	6	7			
Sanag	6	2			
Sool	5	2			

Lesson Observation Forms

Table 6 - Lesson Observation Forms

	Frequency					
	HEI	NFE & ABE	Primary	Secondary	TVET	Grand Total
Ayn		8	14	8		30
Bari	7	2	25	18		52
Hayland		2	3	4		9
Karkaar		8	40	3	2	53
Mudug		4	53	3	2	62
Nugaal		2	42	5	6	55
Sanag		1	20	5		26
Sool		6	19			25
Grand Total	7	33	216	46	10	312

Lesson observations were undertaken in 312 classrooms – enumerators were instructed to collect 5 lesson observations at each school wherever possible.

Survey Responses

Table 7 - Survey Responses

	Male	Female	Total
Child in school¹	287	238	506
Child out of school	337	272	611
Parents of children in school	98	158	255
Parents of children out of school	118	194	312
School leaders and teachers	257	71	331
High level stakeholders	-	-	33
School mapping tool	-	-	479
TOTAL RESPONDENTS:	-	-	2,527

Survey questionnaires were deployed across the state, targeting families in and out of school. Teachers, and high level stakeholders also comprised a core focus of this study.

Enumerators were instructed to select respondents at random; in schools, enumerators were instructed to select an equal number of male and female students from a range of grades and subjects, not drawing the

entire sample from one age or discipline. The same instructions were given for the selection of teaching staff. Enumerators were further instructed not to allow school management to select respondents.

To find parents and children out of school, enumerators were instructed to collect data in the communities at large; to find parents who reported not having children in school or children who reported not being in school, and to undertake interviews with them. The sampling strategy here was largely opportunistic, given limitations of available data for completely random and representative sample selection.

Additional steps were taken (through the School Mapping Tool) to document any unregistered schools, if they existed at all. In all, 2,527 informants were contacted for this study.

Focus Group Discussions

Community Education Committee	110
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Focus group discussions were undertaken with 110 CEC members, with the intent of

gaining a deeper qualitative understanding of the education sector.

¹ In a small minority of cases, respondent gender was not recorded by enumerators; in such cases, it may appear that male/female quantities do not add up to total respondent sums.

Literacy and Numeracy Assessments

Table 8 – Literacy and Numeracy Assessments Undertaken

	Literacy Assessments (Students)	Numeracy Assessments (Students)	Somali Assessments (Teachers)
NFE	117	199	30
Primary	638	1216	208
Secondary	88	73	28
TVET	-	-	10
HEI	-	-	-
Grand Total	843	1488	276

Seeking to provide further data on educational quality and learning outcomes, students and teachers were subjected to literacy and numeracy assessments. A total of 1,488 Primary and Secondary students took basic numeracy tests, while 843 took basic literacy assessments. 276 teachers were given basic Somali literacy tests.

In total, the primary sample far exceeded the target of 1,000.

Secondary Documents Reviewed for this Study

A range of unpublished documents was submitted to the consultancy team, much of which informed analyses, and have provided data used in this report. A detailed list of such documents has been included in the appendices.

Literature Review

Education constitutes a key point in the social and economic development strategies of developing countries. As a result of investing in and strengthening their education systems, many of these countries now see higher enrolment rates and increased numbers of years of schooling (UNESCO, UNICEF, the World Bank, the Global Partnership for Education, 2014a). Nevertheless, universal primary completion is still to be achieved in many countries, and education systems continue to face challenges such as disparities in access to education affecting the poor, girls, children with disabilities, rural dwellers; achievement in learning below international standards; training that does not sufficiently match labour market demand or reflect the skills needed for economic growth; and sector management, efficiency and accountability being largely improvable. (*ibid.*)

Education Sector Analyses are intended to contribute to the improvement of education and represent evidence-based analytical work aiming to inform and monitor national education sector plans, and whose findings serve as a basis for reform. In order to ensure this happens, greater ownership of evidence and education sector analyses and improved capacity to use these are needed. (*ibid.*)

National Ownership

The main issue facing ESAs and their scope is the lack of national ownership of their results. Undertaken as part of a foreign aid relationship by foreign consultants, these studies are regarded by those who are responsible for guiding and managing Africa's education systems as foreign, not developed for their benefit and use in daily work (Samoff, 1999).

*Notwithstanding their potential utility, however, many studies remain under-used, even unread. Although they could play a key role in formulating education development projects, programmes, and policies, their circulation is generally so limited that often they remain unknown outside the agency and researchers who conducted the study. ... It is not uncommon to find key government personnel unaware of a recently completed study and its recommendations. Staff in other governments and agencies, who might well find the analysis instructive and perhaps directly useful, have no reliable way even to know of potentially relevant studies. Thus, a wealth of sector analysis remains inaccessible to many of those who need it most, and an accumulation of experience on development policies and programmes remains unexploited. (*ibid.*)*

This issue can undermine the ESAs credibility and authority and constrain their use and utility as helpful policy making tools for decision makers and partners seeking to increase equity, service delivery efficiency and learning outcomes of the national education system.

In order to instill a sense of national ownership of their results, effective and genuine local and national partnerships in initiating and managing education sector studies are crucial. (*ibid.*)

Revised Methodology

The first ESA guidelines were developed in 1999 under the name of Education Country Status Reports (CSR). Their aim was to

enable decision makers to orient national policy on the basis of a factual diagnosis of the overall education sector and to provide relevant analytical information for the dialogue between government, development partners and civil society (UNESCO, UNICEF, the World Bank, the Global Partnership for Education, 2014a)

Between 1999 and 2014 more than 70 CSR-type reports have been prepared mainly for African countries through partnerships between governments and development partners teams such as the World Bank, UNICEF, UNESCO, African Development Bank, AfD and GIZ. CSRs have been commissioned by governments preparing or revising education sector plans and have been required by the donor community to qualify for Global Partnership for Education (GPE) financing, among others. (*ibid.*)

The more detailed and updated guidelines devised by UNESCO, UNICEF, the World Bank and the Global Partnership for Education aims to:

1. help build national analytical capacities and enhance the preparation of education sector analysis with progressively less external support, a necessary condition for increasing government ownership and thus maximise the chances of analytical findings being turned into reforms
2. provide an updated methodology covering the entire education spectrum from early childhood development to higher education and present detailed, practical and up-to-date methodological approaches to analysis.
3. Align the guidelines with the moving landscape of international aid for education, where support is less and less often project-based and more and more often program-based, and development partners are increasing their efforts towards aid harmonisation and coordination, putting emphasis on joint support to the implementation of education sector plans whose preparation and/or updates require a holistic analysis of the education system, including economic analysis.

Source: (UNESCO, UNICEF, the World Bank, the Global Partnership for Education, 2014a)

Process

Taken from the revised ESA methodology, the following areas have to be addressed and the accompanying steps are required in order to prepare a comprehensive report:

1. **Context of The Development of The Education Sector:** Analyse the socio-demographic, humanitarian and macroeconomic contexts affecting the education sector, including past trends and future prospects
2. **Enrolment, Internal Efficiency and Out-Of-School Children:** Understand the quantitative performance of the education system, for all levels and types of teaching, in terms of enrolment capacity, coverage of different age groups, obstacles to the access to and completion of cycles, efficiency and exclusion.
3. **Cost and Financing:** Offer approaches to the analysis of: (i) the structure of education financing (including by the government, donors and households), its distribution (by item, education level and type of school) and evolution over time, and (ii) the breakdown of spending, through recurrent unit costs, household contributions, and capital costs.
4. **Quality, System Capacity and Management:** Offer approaches to the analysis of: (i) learning outcomes and achievements and their evolution, offering a selection of measurement indicators; (ii) system capacity for converting resources into results, and of institutional arrangements and monitoring tools for results-based management; (iii) the management of teacher recruitment, training and posting; and (iv) the management of other educational resources and of teaching time.

5. **External Efficiency:** Analyse the extent to which education, and each level of education or training in particular, contributes to the achievement of national economic and human development goals.
6. **Equity:** Analyse: (i) the extent to which enrolment patterns and school results vary according to key sociodemographic factors, and (ii) how policy choices in terms of public resource distribution affect equity.
7. **Early Childhood Development:** Analyse in greater detail the early childhood development (ECD) sub-sector to enable its more harmonious, equitable and efficient development.
8. **Higher Education:** Analyse the higher education (HE) sub-sector and all its components in detail, highlighting its specific characteristics, over and beyond the general information provided in earlier chapters of this guide where it has been covered as a sub-sector.
9. **Non-Formal Education and Literacy:** Analyse the non-formal education and literacy subsector to enable its incorporation into global education policies in the framework of Education for All and promote lifelong learning.
10. **Technical and Vocational Education And Training (TVET):** Introduce key questions, issues and methods to conduct an analysis of technical and vocational education and training (TVET) as a specific education sub-sector.

Source: (UNESCO, UNICEF, the World Bank, the Global Partnership for Education, 2014a)
(UNESCO, UNICEF, the World Bank, the Global Partnership for Education, 2014b)

A relevant use of these guidelines would take into account the country context and select the chapters and sections according to their main education policy issues and specific data constraints, as these studies are intended to explore national, and sometimes subnational, education systems and to describe characteristics and highlight problems specific and perhaps unique to a particular country. (Samoff, 1999). The guidelines also recommend that key findings of the different chapters are collected and presented in a policy-relevant way, in an executive summary or policy matrix. Cross-country comparisons are also encouraged (UNESCO, UNICEF, the World Bank, the Global Partnership for Education, 2014a).

This Study

Many of the experiences gained through the development of relevant ESAs and CSRs have informed various iterations of preparation guidance and instruction; it is thought these comprise a set of 'best practices' which can inform the development of this document. As such, GPE and similar guidance have underpinned the conduct of this assignment, as well as the development of this report.

Context

Basic Indicators: Social, Humanitarian, and Demographic Context

This section is dedicated to a preliminary overview of the social, humanitarian, and demographic contexts. A more detailed exploration of these, contextualised by additional primary and secondary data, and their potential impacts on the education sector, can be found in the following sections.

The Evolution of the Total Population and School Age Population

A 2014 population estimation survey was published by the UN covering all of Somalia²; the regional breakdown was along Somalia's pre-war borders. The consultants have taken all of those regions which comprise Puntland's current population, and used them to calculate overall populations and population percentages.

Table 9 – Somalia Population Estimation (UNFPA, 2014) Survey (PESS) by UNFPA

	Urban	Rural	Nomads	IDP	Total
Bari	471,785	65,483	133,234	49,010	719,467
Mudug	381,493	79,752	185,736	70,882	717,863
Nugaal	138,929	31,047	213,227	9,495	392,698
Sanag	159,717	30,804	352,692	910	544,123
Sool	120,993	13,983	187,632	4,820	327,428
Grand Total	1,272,917	221,069	1,072,521	135,117	2,701,579
% of total	47%	8%	40%	5%	

Please note that the above figures are not accepted by the government of Puntland, who have undertaken their own population estimation survey. The population estimates in that study undertaken by the government are substantially higher than those given by the UNFPA:

Table 10 - Puntland Population Estimation Survey by Puntland Government

	Urban	Rural	Nomadic	IDPs	Total
Bari	755,535	261,145	301,878	49,010	1,367,568
Nugaal	192,493	93,555	261,206	9,495	556,749
Sanaag	150,831	178,364	374,567	410	704,172
Sool	147,202	123,949	324,920	4,820	600,891
Mudug	300,170	164,619	270,000	35,100	769,889
Buuhoodle	109,088	51,076	172,000	3,200	335,364
Grand Total	1,655,319	872,708	1,704,571	102,035	4,334,633
% of total	38%	20%	39%	2%	

It is unclear why the statistics submitted by the government of Puntland are nearly double those provided by the UN; nonetheless, such wide variation is cause to approach both sets of figures with a degree of caution.

A sizable urban-rural divide

² The Government of Puntland and the MoE&HE has indicated it rejects these population statistics, preferring instead to rely on 2007 figures. The consultants were given the remit to use the 2014 UN population estimation survey, as specified within the project ToR, to undertake analyses.

exists within Somalia, with 48% (UNFPA) – 59% (Government) of the population comprising nomadic groups or rural individuals. A sizeable population of IDPs is thought to live in Puntland; many people are said to have fled conflict and other humanitarian emergencies in South Central Somalia for relatively peaceful Puntland (World Bank, 2003); the totals comprise between 2%-5% of national population, depending on the data source.

Table 11 - Somalia Population by Age

UNFPA and World Bank Stats.			Puntland Gov. Stats.		
	Total population (est.) (UNFPA, 2014)	% of total (World Bank Statistics)		Total Population (Government Statistics)	% of Total (Government Statistics)
0-15 Years	1,231,920	45.6%	0-4	610,133	14%
0-30 Years	2,026,184	75%	5-9	691,226	16%
			10-14	619,065	14%
			15-19	525,032	12%

Somalia as a whole is a young country; the UNFPA survey reported that 45.6% of the population is between the ages of 0-15, and 75% 30 and under; Puntland government statistics indicated that c. 30% of the country is of primary school age, and 56% of the country is under the age of 20. This sizable youth population is thought to be driven by large family sizes, and is placing pressure on limited educational provision (this is explored in more detail in later sections).

Table 12 - Somalia Population Growth (World Bank, 2015)

	1990	2000	2008	2012	2014
Population growth (annual %)	0.57%	3.26%	2.48%	2.29%	2.40%
Urban population growth (annual %)	1.8%	4.4%	3.6%	3.8%	3.6%
Net migration	-400000	..

Source: (World Bank, 2015)

Population growth rates across all of Somalia were relatively low during the 1990s, thought to be a result of the conflict and civil war in that time. Puntland population growth rates were said by some commentators to be higher than the Somali national averages given above, due to relative peace and stability, as well as the large influx of refugees from the south (World Bank, 2003). However, these estimates were from 2003, not giving specific figures; more recent statistics focussing on Puntland were not available.

The disparity between the national and urban growth rates would appear to indicate a rural-to-urban shift in population centres, a topic touched on in later sections, and substantiated by additional data collected as part of this ESA.

Outward migration to wealthier and more stable countries has been widely reported in Somalia, with those limited studies undertaken showing a potential outward migration of 400,000 people

annually in 2012 (World Bank, 2015). Young people are widely seen to want to leave the country in search of a better life, posing potential challenges to the ongoing development of the country.

Defining a Child

In most western contexts, children are defined as those under the age of 18; however, within Somalia the definition of a child tends to younger and more fluid, with those as young as 14-16 often considered appropriate for marriage and expected to help provide for families. While this may pose some challenges to the interpretation of data resulting from qualitative discussions, it is nonetheless important to bear in mind these definitional distinctions. For clarity, this document will define a child as anyone under 18, and where definitional challenges emerge in interpretation of the data, they will be addressed as appropriate. s

Basic Social Indicators

Puntland-specific figures were challenging to secure, and those covering Somalia as a whole were somewhat limited. However, a selection of basic social indicators from Somalia have been found and presented below.

Table 13 - Adult Literacy Rate (UNSECO, 2016)

Adult Literacy Rate (15 years and over, 2000–2006)	Female: 25.8% Male: 49.7% Total: 37.8%
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The most recent adult literacy data is from 2006; it is possible that there have been changes in literacy rates subsequent to this, particularly within

relatively more stable Puntland. However, the figures provide some insight into the current humanitarian, human capacity, and development context Puntland.

In terms of life expectancy, Somalia ranks in the bottom 11 internationally, and substantially lower than the average for low-income and Sub-Saharan African countries:

Table 14 - Somalia Life Expectancy and Neonatal Mortality Rates (World Bank, 2015)

	Life expectancy at birth		Neonatal mortality rate per 1,000 live births	
	1990	2014	1990	2015
Somalia	45	55	45	40
Sub-Saharan Africa	50	59	46	29
Low income	50	61	49	27
Lower middle income	60	67	48	26
Upper middle income	68	75	28	9
High income	74	79	8	4

The national mortality rate is also substantially higher than the sub-Saharan average, with 40 per 1,000 live births vs sub-Saharan Africa's 29. Within infant mortality, under-five mortality, and adult mortality too, there appeared to be a substantial gap between Somali figures and those of other African and low-income nations:

Table 15- Infant Mortality Rate and Under Five Mortality Rate

	Infant mortality rate per 1,000 live births		Under-five mortality rate			
			Total		Male	Female
	1990	2015	1990	2015	2015	2015
Somalia	108	85	180	137	143	130
Sub-Saharan Africa	109	56	181	83	89	78
Low income	113	53	187	76	81	71
Lower middle income	83	40	120	53	55	51
Upper middle income	43	15	55	19	20	18
High income	13	6	16	7	8	6

Table 16 - Adult Mortality Rate (World Bank, 2015)

	Adult mortality rate	
	Male	Female
	per 1,000	per 1,000
	2009-2014	2009-2014
Somalia	346	285
Sub-Saharan Africa	328	285
Low income	283	236
Lower middle income	223	155
Upper middle income	134	88
High income	112	62

All of these indicators point to a context where life expectancies are relatively low and mortality rates high, posing substantial humanitarian and social challenges to the development of the country.

Malaria, HIV, and Illness

While limited data on the rates of malaria in Somalia are available, incidences appear to be reducing in Somalia. The WHO reported that the prevalence of Malaria in Puntland is relatively low, with cases of 0.1-1.0 per 1,000 people (WHO, 2015). It is unclear, however, what, if any, impact malaria is currently having on the education sector.

Reported rates of HIV are also low within Somalia, with 0.5% of the population recorded as being impacted annually; however, it is unclear whether these figures accurately represent rates of infection, or rates of reporting. Rates of vaccination for measles – thought to be an indicator of other immunisations – are also rather low, with only 46% of the population reported to have been immunised.

Table 17 - Immunization and HIV Rates (World Bank, 2015)

	1990	2000	2008	2012	2014
Immunization, measles (% of children ages 12-23 months)	30	24	34	46	46
Prevalence of HIV, total (% of population ages 15-49)	0.1	0.7	0.6	0.6	0.5

The above indicators, while encouraging in some respects, would appear to indicate that Somalia as a whole and Puntland, as a part of it, have some room for improvement in the coming years.

The Composite Social Context Index

Insufficient data was available to establish a composite social context index for Puntland specifically, or Somalia as a whole. However, taken together, the indicators and statistics explored in this and other sections are instructive.

The Linguistic Context

The Somali language is spoken most widely within Somalia; reports have indicated that the language is relatively homogenous, with minimal regional and dialectic variation, and a strong tendency toward linguistic convergence (LandInfo, 2011).

Arabic is also spoken widely in Somalia, but specific percentages and figures are difficult to establish. Some linguistic minorities reside within Somalia as well, and populations statistics were similarly challenging to find:

1. Oromo
2. Boon (Af-Boon)
3. Mushungulu
4. Swahili

However, these groups are widely reported to speak fluent Somali, and be well integrated in local society (*ibid.*).

Somali is the de-facto language of instruction throughout most of Puntland, though some Quranic schools seek to teach children in Arabic. In recent years, some efforts have been made to make English the language of instruction in secondary and HEI institutions, though it is unclear (as we will see in later analyses) how successful these have been across the entire education sector.

Humanitarian Context

An entire section, including detailed analysis of primary and secondary qualitative and quantitative data, has been dedicated to humanitarian concerns in the following section, on page 63.

Basic Indicators: The Macroeconomic and Public Finance Contexts

GDP and Per Capita GDP Trends

Table 18 - GDP and Per Capita GDP Trends (Samantar, 2011)

	2010
Puntland GDP Growth Rate (US\$)	2.24% (est.)
Puntland PPP	\$1,675 (est.)
Puntland per capita GDP	\$418 (est.)
Puntland GDP (US\$)	1,340,789,968

Official figures from the Puntland Ministry of Planning and International Cooperation paint an encouraging picture of the current economic situation in Puntland, with economic growth reported as 2.24% in 2010, and per capita GDP at \$418 (compared to Somalia's \$129 in 2013) (UN, 2013).

Puntland's purchasing power parity was reported in some metrics as comparable to that of India (Samantar, 2011), indicating again that Puntland may be doing relatively well economically, as compared to other parts of Somalia.

Public Resources and Public Education Expenditure

Table 19 - Public Resources and Public Education Expenditure

Details	2010	2011	2012	2013	2015
MoE&HE actual budget	890, 719	1,069,526	1,384,565	1,186,658	4,212,751 ³
Total Government Budget	28,020,000	30,158,200	38,622,800	39,277,340	60,182,157
MoE&HE Percentage of Total Budget	2.0%	3.5%	3.5%	3.5%	7% ⁴
MoE&HE personnel Costs as a percentage of MoE&HE Budget	49%	64%	64%	85%	

Securing sector-level funding data has proven challenging, though overarching figures have been provided by the MoE&HE. In absolute and relative terms, the education budget of Puntland has been increasing rapidly in the last years, rising from 2% of \$28m USD in 2010 to 7% of \$60m USD in 2015.

It is unclear, on the basis of available documents and data, where revenues are coming from, or on what, specifically, they are being spent. However, given that the national budget has grown from 30,158,200 in 2011 to 60,182,159 in 2015, optimistic assessments of increasing resource availability may be appropriate.

³ (Garowe Online, 2015)

⁴ (GPE, 2016)

Teacher Pay

Selected school budget and teacher salary figures have been provided to the consultancy team; conclusions and data have been drawn from these as appropriate:

Government Teachers' Salary Allocations

Table 20 - Government Teachers' Salary Allocations

Year	Monthly Teachers \$ USD	Annual Teachers \$ USD
2014	65,333	783,996
2015	65,333	783,996
2016	104,916.3	1,258,996

Individual Teachers and Salary Allocations

Table 21 - Individual Teachers and Salary Allocations (in USD)

Description	No. of teachers	Budget per teacher	Monthly Basis
Secondary	304	70.4	21,401.6
Primary and others	891	56.45	50,296.95
TOTAL	1,195		71,698.55

Education Sector International Partner Incentive Payments

Table 22 - Partner Incentive Payments

Education partners (project name)	Male	Female	Total	Ending time	Amount paid
UNICEF (GPE)	746	176	922	June, 2016	\$60
CARE International (WWI phase 2)	32	36	68	July, 2018	\$50
Relief International (GEC, EGEP)	121	39	160	March, 2017	\$65
ADRA (SOMGEP)	0	51	51	March, 2017	\$50
World Vision (ARP)	38	10	48	Dec, 2017	\$88
NRC (ABE)	324	76	400	Dec, 2016	\$61
Total	1427	440	1867		

Much of the provided data is insightful, indicating that teacher salaries paid by the government and international organisations do not, in most cases, make up the majority salaries paid to teachers. Furthermore, on the basis of submitted data, it appears that at least 79% of teachers in Puntland remain unpaid by the government.

Furthermore, the data above does not allow for more detailed insights do be drawn, however teacher pay was also explored by enumeration teams in each of the schools and regions visited:

Table 23 - Teacher Pay – Average by Subsector

HEI	\$325.00	Primary	\$164.07
NFE	\$27.83	Ayn	\$90.00
Ayn	\$00.00	Bari	\$263.00
Bari	\$15.00	Hayland	\$60.00
Karkaar	\$36.00	Karkaar	\$172.50
Mudug	\$68.00	Mudug	\$135.67
Nugal	\$60.00	Nugal	\$263.91
Sool	\$00.00	Sanag	\$145.71
Secondary	\$288.64	Sool	\$86.83
Ayn	\$220.00		
Karkaar	\$273.00		
Mudug	\$383.33		
TVET	\$122.22		

Primary teachers reported receiving an average of \$164 USD per month, while secondary an HEI teachers reported relatively high salaries at \$288 and \$325 respectively. NFE provision appeared to rely heavily on volunteer staff, dropping average rates of pay across the sector.

These salaries have been cited by many stakeholders to be very low, making recruitment and retention of good teachers a substantial challenge. It also seems, in light of the official government and partner salary payments, that in the majority of cases, teachers are being paid from school fees.

Teachers were also asked to comment on whether salaries were ever delayed, and if so by how long:

Are salary payments ever delayed?

Table 24 - Delayed Salary Payments

	%					
	No	Yes	Once or twice per year	Every few Months	Monthly	Sometimes we don't get paid
HEI	100%	0%				
NFE	36%	64%	0%	17%	67%	17%
Primary	46%	54%	5%	35%	60%	0%

Secondary	73%	27%	0%	67%	33%	0%
TVET	100%	0%				

NFE, primary, and secondary teachers all reported late payment, with TVET and HEI reporting relatively stable and reliable

salary payments. NFE, primary, and secondary teacher all reported late payment as occurring with a relative degree of frequency.

Table 25 - Length of the Delay

	%			
	Other	Months	Weeks	Days
NFE	0%	60%	20%	20%
Primary	7%	20%	24%	49%
Secondary	25%	25%	25%	25%

The NFE sector appears to have reported the most difficulty in getting paid on time, indicating payments are often delayed by months, while the other sectors indicated that in most cases delays were only a few days or weeks. Regardless, delayed payment to teachers is a cause for potential concern, having the potential to exacerbate concerns relating to teacher recruitment and retention.

International Assistance

Somalia as a whole, Puntland being no exception, depends heavily on foreign aid assistance. Figures for Somalia comprised:

Table 26 – Somalia Net Official Development Assistance and Official Aid Received (World Bank, 2015)

	2010	2013	2015
Net official development assistance and official aid received (current US\$)	514,810,000	990,130,000	1,109,380,000

Establishing specific inflows to Puntland has been a challenge, particularly within the education sector.; however, qualitative interviews with high-level NGO staff have indicated that c. 20% of all aid funding to Somalia is for Puntland. The UN’s financial tracking service only tracks allocation to country-level actors, and is often not allocated to specific projects but rather to generic ‘country funds’ held by larger international organisations. Making tracking down to final expenditure level difficult. While some actors have widely publicised their allocations to the education sector (see the GPE’s c. \$2 million USD contribution) (GPE, 2016), securing specific finance and activity data from international partners proved challenging. Nonetheless, foreign aid remains an important factor in the development and financing of Puntland’s education sector.

Education Unit Costs and Related Measures

Limited data casting light on subsector- and activity-specific revenue and expenditure have been submitted by the MoE&HE nor education partners; some data as it relates to teacher salaries has been analysed below. Beyond basic analysis of certain types of expenditure, further analysis of efficiency, and government-vs-NGO funding mechanisms and impact are not possible yet.

Household Contribution to Education

Limited, if any, official data was available on this indicator. However, the ESA team sought to collect data directly from families, establishing average-reported fee rates across Puntland.

School Fees

The education sector in Puntland is largely funded by school fees paid by parents, though the government and some international organisations have been increasing funding to schools and teachers in recent years. The specific amounts allocated to the education sector by the government and NGOs have been a challenge to establish, as were official fee rates. However, the consultants undertook to establish broad fee rates paid by students and parents across Puntland by asking visited schools and families themselves how much they must pay for school fees.

Average Annual Fees as Reported by Schools (in USD)

Table 27 - Average Annual Fees as Reported by Schools in ESA Survey

	Rural	Urban	Average		Rural	Urban	Average
Ayn	\$15.00	\$54.00	\$41.00	Mudug	\$75.38	\$75.00	\$75.21
Primary	\$15.00	\$54.00	\$24.75	Primary	\$55.80	\$75.00	\$66.27
NFE		\$00.00	\$00.00	NFE	\$63.00		\$63.00
Secondary		\$135.00	\$135.00	Secondary	\$130.50		\$130.50
Bari	\$63.00	\$167.00	\$132.33	Nugal	\$78.00	\$74.70	\$76.82
Primary	\$94.50	\$149.25	\$131.00	Primary	\$81.00	\$74.70	\$78.14
NFE	\$00.00		\$00.00	NFE	\$00.00		\$00.00
Secondary		\$202.50	\$202.50	Secondary	\$108.00		\$108.00
Hayland	\$135.00	\$90.00	\$120.00	Sanag	\$66.00	\$99.00	\$77.00
Primary	\$90.00	\$90.00	\$90.00	Primary	\$66.00	\$49.50	\$61.88
Secondary	\$180.00		\$180.00	Secondary		\$198.00	\$198.00
Karkaar	\$56.57	\$46.93	\$51.75	Sool	\$12.86	\$103.50	\$33.00
Primary	\$66.00	\$36.90	\$52.77	Primary	\$18.00	\$103.50	\$42.43
NFE	\$00.00	\$00.00	\$00.00	NFE	\$00.00		\$00.00
Secondary		\$144.00	\$144.00				

Average Annual Fees as Reported by Survey Respondents (in USD)

Table 28 - Average Annual Fees as Reported by ESA Survey Respondents

	Annual tuition costs	Annual book costs	Annual uniform costs	Annual average total cost
HEI	\$1,237.50	\$175.00	\$300.00	\$1,712.50
NFE	\$78.11	\$13.04	\$19.25	\$110.40
Ayn	\$71.82	\$16.50	\$22.40	\$110.72
Bari	\$153.00	\$2.00	\$15.00	\$170.00

Karkaar	\$80.00	\$4.00	\$13.00	\$97.00
Mudug	\$70.00	\$40.00	\$-	\$110.00
Nugal	\$77.64	\$8.88	\$18.75	\$105.26
Sool	\$80.00	\$13.50	\$23.50	\$117.00
Primary	\$109.61	\$17.07	\$23.01	\$149.68
Ayn	\$134.17	\$23.50	\$34.25	\$191.92
Bari	\$293.69	\$16.44	\$20.52	\$330.65
Hayland	\$99.09	\$5.63	\$11.37	\$116.09
Karkaar	\$110.01	\$16.93	\$20.84	\$147.78
Mudug	\$80.34	\$30.87	\$34.98	\$146.19
Nugal	\$107.00	\$9.83	\$16.70	\$133.52
Sanag	\$70.90	\$5.54	\$13.83	\$90.27
Sool	\$116.00	\$17.07	\$28.91	\$161.98
Secondary	\$211.32	\$22.21	\$32.36	\$265.89
Ayn	\$150.00	\$34.78	\$65.33	\$250.11
Bari	\$389.55	\$11.36	\$31.91	\$432.82
Hayland	\$174.38	\$5.38	\$17.38	\$197.13
Karkaar	\$172.80	\$31.90	\$29.50	\$234.20
Mudug	\$214.44	\$50.63	\$35.00	\$300.07
Nugal	\$170.00	\$10.00	\$50.00	\$230.00
Sanag	\$146.36	\$6.64	\$16.27	\$169.27
TVET	\$100.00	\$7.50	\$10.00	\$117.50

There was some discrepancy between fee rates reported by families and those reported by schools. This discrepancy may be cause for further investigation.

Fees were broadly found to be lower in rural areas when compared to urban schools, and there was some regional variation. However, families reported paying an average of c. \$150 USD per annum in primary schools, 265 USD per annum in secondary schools, \$117 USD per annum for TVET provision, and 110 USD per annum for NFE. These findings will be useful in efforts to evaluate costs and input requirements at later stages.

In a state where per-capita GDP is reported at \$418, school fees for a single child in primary school take up c. 30% of that income. It appears then that families are prioritising children's education where they can afford it, though in the case of large families (as we will see in later sections), school fees pose challenges to educating all children within those families, and may be leading to difficult choices about which child to send to school.

Mapping the Education Sector

The most recent figures on GER in Puntland are from the 2015/16 EMIS yearbook, where the Primary GER was listed at 57.9% (an increase from 46.8% in 2012/13) and Secondary GER was listed as 14.7% in 2015/16 (an increase from 9.4% in 2012/13). For reference, Uganda's Primary GER is 110%, and secondary GER is 26%; while South Africa's Primary and Secondary GERs are 99% and 98% respectively. These figures would appear to support the view that Puntland is lagging beyond other countries within the region in terms of primary and secondary enrolment.

The male primary GER in Puntland comprised 63.8%, while the female GER comprised 51.8%; secondary GER comprised 18.1% male and 11.1% female. This would appear to indicate a gap in male and female enrolment; a factor which is explored in more detail in later sections.

However, the education sector as a whole appears to be growing rapidly, with substantial gains in enrolment in recent years. As such, it may prove useful to present a contextualising overview of the education sector. A range of data was made available to the consultants casting light on the structure, size, and composition of the state's education sector. Much of this data is centred within the state's Education Management Information System (EMIS).

Shift away from Education in Emergencies (EiE) Provision

As Puntland becomes more stable and prosperous, a shift away from project-focussed EiE provision appears to be occurring, with increasing capacity and oversight held by the Puntland government. In recognition of this shift to more sustainable models of delivery, the GPE recently awarded Puntland \$2.1M USD to pay teacher incentives and train a selection of teachers (GPE, 2016). However, the specific proportion, and changes in proportion, of EiE to more sustainable models of delivery cannot yet be established. Relevant information from the Ministry and educational partners has been requested.

Structure of the Puntland Ministry of Education

An overarching Ministry of Education Organigram, provided by the MoE, can be found below. A more detailed MoE&HE organigram can be found in the appendices. Several of the role descriptions have been drawn directly from the CFBT MoE&HE Capacity Assessment, and have been amended as appropriate.

Figure 1- Structure of the Puntland Ministry of Education (Source MoE&HE Documents) -

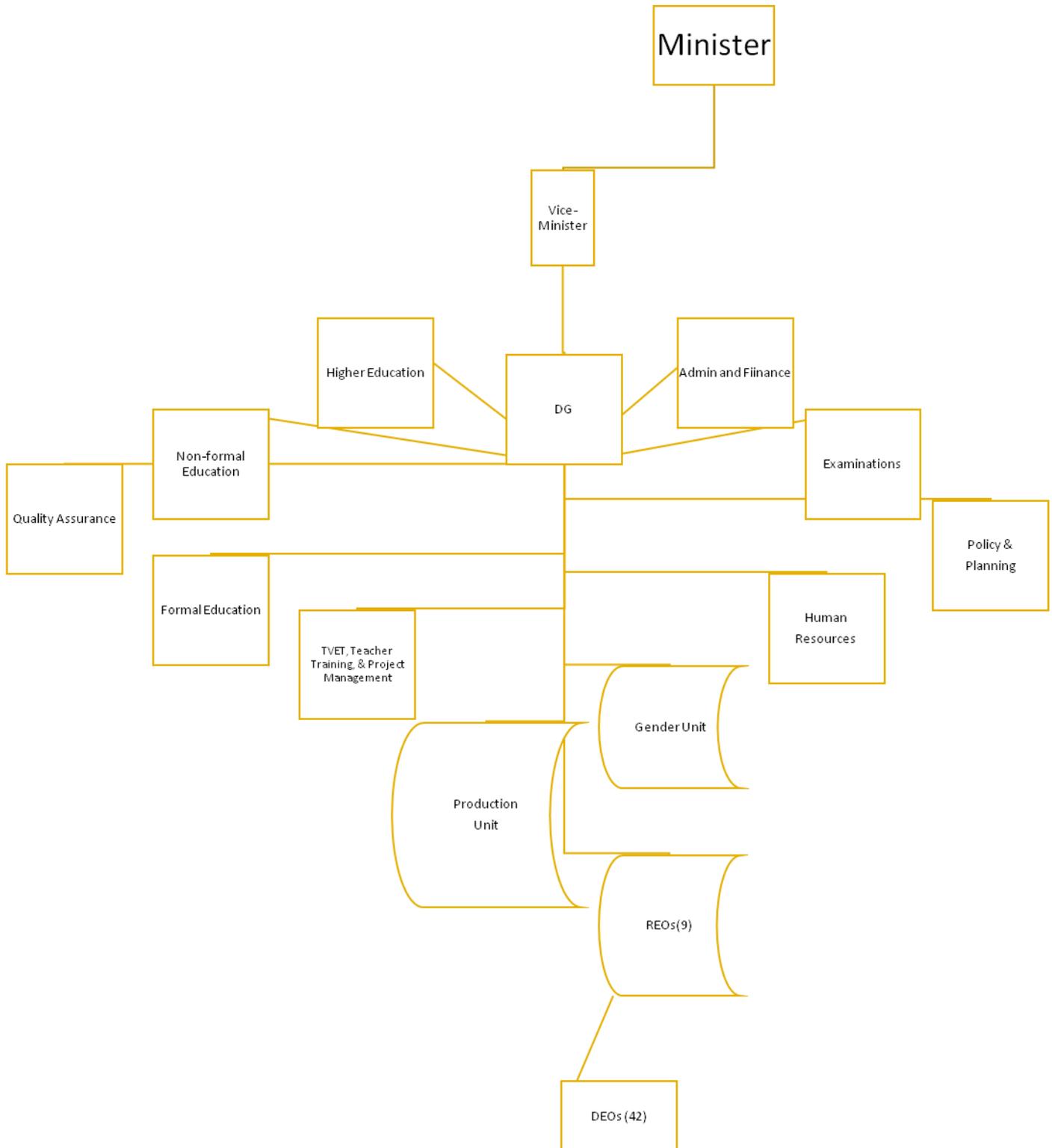


Table 29 - Structure of the Puntland Ministry of Education

Level		
1	Minister	The top official in the MoE&HE, the Minister oversees the MoE&HE, seeking to ensure smooth operations, and that activity is undertaken in keeping with government policy.
1	Vice Minister	The Vice Minister of Education assists the Minister in overseeing the MoE&HE, seeking to ensure smooth operations, and that activity is undertaken in keeping with government policy.
2	Director General (DG)	The Director General is responsible for the day-to-day management of the MoE&HE, holding the largest operational oversight responsibility.
3	Higher Education	The Higher Education department is relatively small, reported to include only one member of staff. This person is responsible for overseeing all Ministry activity as it relates to higher education; however, in light of recent passage of the Higher Education Institution Act, it is anticipated this department and its responsibilities will grow substantially.
3	Non-formal Education	The NFE section oversees all activity relating to the provision of NFE, as well as adult education.
3	Quality Assurance	Quality Assurance and Standards Department is directly in charge of curriculum implementation, standards and quality assurance in primary and secondary schools nationally. QAS services are fairly decentralized to the regional and in some cases to the districts levels.
3	Formal Education	The formal education section oversees all activity relating to the provision of primary and secondary education, and has staff with particular focus on IDPs and SNE.
3	TVET, Teacher Training, and Programmes	Technical Vocational Education & Training (TVET) operates as a unit at the MoE&HE and is headed by the Director of programs. Included in this section are teacher training.
3	Examinations	The examinations section is responsible for developing and setting central examinations content, as well as overseeing examination deployment across the state; Certifications are also included within this area of activity. All certifications are recognised within Puntland, though some challenges receiving national and international recognition have been faced by the MoE&HE.
3	Policy and Planning	Included within this section is the EMIS unit and they seek to design, evaluate, set, and improve policy across the education sector, and use evidence and policy documents to inform further

		planning. M&E is also a responsibility of this department.
3	Human Resources	The HR department is responsible for hiring and staff development within the ministry, in addition to assisting with staff appraisals and related activity.
3	Administration and Finance	The admin and finance team are broadly responsible for management of finance, procurement, and logistics, and are additionally responsible for the oversight of cleaners, quartermasters, drivers, guards, gardeners, and similar staff.
4	Gender Unit	The gender unit seeks to support all other divisions in promoting female participation and success across the education sector; their work comprises both a central and regional focus, working closely with relevant stakeholders to achieve unit goals.
4	Production Unit	The production unit is responsible for printing, binding, and distribution of materials – both textbooks, information books, and ministry materials.
5	Regional Education Authorities (REOs)	The REOs hold responsibility for regional QA and supervision activities, including undertaking inspections and ensuring curricula and practice meet required standards, as well as delivering relevant training at the regional level. REOs also include regional gender units.
6	District Education Authorities (DEOs)	DEOs (of which there are 42) hold similar responsibilities to REOs, but devolved even further to the District level, inspecting and overseeing provision at relevant schools.

A more detailed analysis of the Ministry's capacity can be found in later sections.

Structure of Puntland's Education System

The Puntland Revised PEPP lays out the focus and objectives of each level of Puntland's education system:

Table 30 - Structure of Puntland's Education System

<p>Early Childhood Education (ECE)</p> <p>Promote the holistic cognitive, emotional, social and psycho-motor growth and development of the young child. ECE will aim to foster the holistic development of children in an environment in which children feel secure, are stimulated and have opportunities to play, explore and develop.</p> <p>ECE is offered to children in the 3-5 age brackets. The focus of ECE is on stimulating and developing the cognitive, affective and psycho-motor skills of the young child and his/her holistic development: Early Childhood Education should be fun.</p> <p>ECE will also prepare children for formal schooling and ease the transition from home to primary school.</p>

Primary Education

The main objectives of primary education are to introduce the child progressively to the world around him/her and to lay a solid foundation for future learning. Primary education will:

- ❖ Promote learners' growth and acquisition of spiritual, cultural and intellectual values and adaptive attitudes to life based on Islamic principles and ethics.
- ❖ Inculcate basic literacy, numeracy, and reinforce communicative and manipulative skills and foster the growth of desirable civic qualities of tolerance, respect for others, maintenance of peace and patriotism.
- ❖ Stimulate learners' desire for knowledge and lay the basis for future/further learning

Primary school education is generally offered to learners in the 6-14 age brackets. The primary education level is comprised of a four-year, Grade 1-4 elementary cycle and a four-year Grade 5-8, intermediate cycle. The Puntland Primary School Leaving Examination (PSLE) assesses the completion of this stage and determines transition into secondary school.

Within Primary, the government considers Alternative Basic Education (ABE) to comprise a component of the subsector. In many cases, analyses of primary include the ABE sector; the consultants have undertaken analyses building on this practice, and have sought to provide individual analyses of ABE where appropriate and as the data allows.

Integrated Quranic Schools (IQS)

Qur'anic education forms an important component of Puntland's education sector, with provision including both ECE and primary levels. Seeking to recognise the sector's contribution, the Ministry of Education undertook to bring qur'anic schools into current oversight and administrative mechanisms. As such, qur'anic schools have been integrated into EMIS and other administrative mechanism, and the Ministry has sought to unify and provide curriculum materials across all relevant schools. Across many government and international organisations' analyses, IQS schools are considered primary schools; as such, the consultants have sought to include IQS schools in primary school analyses, providing individual, sector-level analyses where possible.

Secondary Education

Secondary education seeks to accomplish the following:

- ❖ Facilitate all around development of students spiritually, mentally, culturally and morally according to the norms and principles of Islam so that they can make positive contributions to the development of society.
- ❖ Equip learners with appropriate skills and attitudes to enable them to achieve a better understanding of the world around them, realize their full potential, appreciate education, develop critical thinking and problem solving abilities, and encourage innovativeness.
- ❖ Promote positive attitudes and cohesion related to national patriotism, co-operation and adaptability, and develop the knowledge base for students' access to tertiary education within Puntland and abroad.

Secondary school is intended for students from age 14-18, comprising four years (or forms) of study. Secondary education seeks to prepare students for university-level study.

Non-Formal Education (NFE)

The objective of this component is to provide a relevant alternative curriculum for primary and secondary education to improve the quality of complementary and NFE-based programmes for children, youth and adults who are not able, due to special and difficult circumstances, to follow the formal schools and to develop Life, Numeracy and Literacy skills. This category of provision

also includes flexible education for nomadic students.

Teacher Training

There exists one dedicated teacher training institution in Puntland (GTEC), and two other institutions which offer some limited teacher training provision. These centres offer a combination of in-service and pre-service teacher training programmes, to either the diploma or bachelor's level for secondary or primary teachers. However, the capacity of these institutions remains limited, unable to keep up with the demand for trained teachers within the sector. NGOs have offered a substantial portion of teacher training within Puntland, offering a range of short-term training; however, the quantities of training offered have not yet been established due to a lack of data.

Higher Education Institutions

There are a number of higher education institutions in Puntland, offering a range of diploma, certificate, bachelors, masters and PhD programmes. The duration, focus, and requirements of each programme are highly dependent on each university.

A Higher Education Act was recently passed by the Puntland parliament, seeking to give the central government more control over certificates and practices within the sector; however, this process has only recently begun, with relevant regulatory institutions not yet fully established.

Technical and Vocational Education and Training

TVET in Puntland remains largely project-driven, with NGOs providing short training courses to target beneficiary groups. While some limited centre-based provision does appear to exist, the TVET sector remains largely undeveloped, with no substantive national qualifications scheme. The government of Puntland, similarly, has limited regulatory or oversight capacity of the sector.

Puntland National Examinations Board (PNEB)

The Puntland National Examinations Board sets national examinations and qualifications standards across the primary and secondary subsectors. The 2015 national examinations report indicated that PNEB set and marked national examinations for 7,255 grade eight and 2,821 form four students, providing qualifications to all passing pupils. These certifications are recognised across Puntland, though some challenges have been faced in gaining recognition from the federal government and internationally. IQS pupils are, in principle, able to take these qualification of completion of the requisite level of study, and ABE pupils, given that provision does not extend to grade eight, do not sit relevant examinations.

Educational Institutions in Puntland

Across each of the sectors described above, there has been some growth in recent years in quantity and capacity of education institutions, as well as the MoE's capacity for tracking them:

Table 31 - Educational Institutions in Puntland (EMIS Database)⁵

	Frequency	
	2012/13	2015/16
Alternative Basic Education	23	67
Primary Schools and IQS	508	617
Non formal Education	N/A	113
Secondary School	51	78
Higher Education	N/A	20
TVET	N/A	13
Grand Total	582	908

NFE, TVET, and HEI institutions were not tracked by EMIS systems in 2013. As such, they were not provided to the consultancy team; however, increased capacity enabled figures to be provided in 2015. In analyses of primary education, ABE and IQS provision is frequently included within that designation; individual analyses have been undertaken where data allows.

Primary schools (including ABE and IQS provision) make up the largest percentage of all schools in the state, followed closely by NFE centres – this

is unsurprising given Puntland's limited resources and GER. Primary education has formed the core focus of much activity in the state. Quantities of primary schools also grew rapidly in past years, increasing by over 100 between 2012 and 2015.

EMIS data also included information on whether the institutions served largely rural or urban students.⁶

Table 32 - Rural / Urban Educational Institutions in Puntland (EMIS Database)

Region	Frequency			Region	Frequency		
	Rural	Urban	Grand Total		Rural	Urban	Grand Total
Ayn	21	15	36	Mudug	65	66	131
Primary	20	8	28	Primary	50	47	97
NFE	1	4	5	NFE	9	10	19
Secondary		2	2	Secondary	6	4	10
HEI		1	1	TVET		2	2
Bari	62	115	177	HEI		3	3

⁵ Note regarding discrepancies in reported enrolment and institution counts: multiple datasets have been submitted to the consultants; many of these have had marginally different enrolment or institution counts. In the cloud-based EMIS database, totals continue to shift; it remains unclear why totals have continued to shift, nor which are the correct totals. This casts some doubt on the reliability of the figures; concerns which have been highlighted in relevant sections of this document. The consultants have attempted to consolidate totals as well as possible; however, some datasets have specific information not available in others. In these cases, data with the relevant data has been used. This may have resulted in marginal shifts in enrolment and institution numbers in different sections of this document.

⁶ Data for 2014/15 was the most recent year that Carfax Projects was given access to.

Primary	53	89	142	Nugaal	88	64	152
NFE	7	5	12	Primary	68	35	103
Secondary	2	13	15	NFE	14	12	26
TVET		1	1	Secondary	6	4	10
HEI		7	7	TVET		9	9
Gardafuu	13	10	23	HEI		4	4
Primary	12	10	22	Sanag	45	18	63
Secondary	1		1	Primary	36	13	49
Hayland	15	10	25	NFE	5		5
Primary	12	8	20	Secondary	4	3	7
NFE	1		1	HEI		2	2
Secondary	2	1	3	Sool	73	27	100
TVET		1	1	Primary	47	19	66
Karkaar	65	63	128	NFE	22	1	23
Primary	51	50	101	Secondary	4	4	8
NFE	11	6	17	TVET		2	2
Secondary	3	4	7	HEI		1	1
TVET		2	2				
HEI		1	1				
Grand Total	447	388	835				

A range of ‘authorities’ oversee and/or support schools within Puntland. These authorities, and their schools’ designations, comprise: NGO Schools; Community Schools; Private Schools; and Government Schools. The MoE&HE gave the following information regarding oversight of schools in Puntland in 2015/2016:

Table 33 – Authorities with “ownership” of schools in Puntland according to MOHE (EMIS Database)⁷

Frequency

⁷ It is unclear what “ownership” means in this context, schools across Puntland State of Somalia receive funding, support, direction and oversight from the MOHE, NGOs and communities. Previous versions of the EMIS database divide schools into those primarily under the authority of the communities, MOE&HE, NGOs and private sector.

	MOE&HE/Government	Non-government	Total
Primary⁸	420	197	617
Secondary	56	22	78

While there are distinct authority designations within the EMIS database, there is wide degree of overlapping responsibility and support across schools. It is not uncommon for MoE&HE schools to receive substantial support (both financial, monetary, and staff development) from NGOs, nor for community schools to receive substantial relevant support from other authorities. As such, there is significant overlap in funding structures for different school types, and distinguishing clearly between these is not already straightforward, given the lack of data on all support inflows to individual schools across all of Puntland's education sector actors.

However, data submitted by the Ministry of Education, as well as educational partners, has indicated the following regarding the MoE&HE's intended role within the education sector:

Intended Role	Actual Role
Development and distribution of curriculum materials.	The MoE&HE indicated that while new curriculum materials had been developed, and new standards had been mandated, no distribution of relevant materials had been undertaken since 2011.
QA inspections/supervision and support	Broad inspection systems had been developed by the MOE, and some inspections undertaken, however the MoE&HE and relevant school operators indicated that limited had been undertaken, with the majority undertaken in urban areas. The MoE&HE has indicated c.200 supervisions are undertaken annually.
Funding of government school costs	The MoE&HE has indicated that central staffing costs comprise c 85% of the total MoE&HE budget; that only 15% remains for funding distribution of curriculum materials, payment of teacher salaries, and other relevant costs within the education sector. This ratio emerged from reports and presentations submitted by the MoE&HE.

It is clear from the above information that the MoE&HE's engagement with the education sector remains limited (even within government schools), with very little funding available for covering government teacher salaries, investment in infrastructure, teacher training, or distribution of teaching and learning materials.

Institutional Enrolment

Enrolment figures also show a rapid and encouraging growth between 2011 and 2016 across the sector as a whole, though some exceptions to this can be seen in the table below.

⁸ Excluding ABE

Table 34 – EMIS Database and Educations Statistics Yearbooks Enrolment Figures 2011 - 2016:

	Number of students enrolled				
	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
HEI	-	-	9,841	10,688	11,554
NFE	-	-	14,444	15,663	15,097
ABE	7,204	3,517	7,668	8,114	9,176
Primary including IQS	100,703	105,978	126,153	129,411	138,651
Secondary	-	12,810	17,796	20,248	21,988
TVET	-	-	4,213	3,637	2,828

School Feeding Programmes

Hunger appears to be a substantial challenge facing Puntlanders; the WFP recently reported that c. 385,000 children in the state are in need of food aid or are vulnerable to hunger.

Many commentators have described the negative impacts of hunger on learning and child welfare: poor learning outcomes, absenteeism, and lack of focus are just some of these (SCI, 2013). Seeking to meet needs, between 2011 and 2015, data on school feeding was logged within the EMIS system:

Table 35 - School Feeding Programmes (MOE&HE School Feeding Report)

Survey Year	Children
2011	5,336
2013	32,277
2015	28,923

It appears that data is still being entered into the EMIS system for the 2015 year; as such, counts may increase in the coming months. Furthermore, these feeding counts appear to stem from self-reported or planned numbers, and may not have been subject to independent validation. As such, they must be approached with a degree of caution.

Nonetheless, there has been substantial growth in school feeding programmes since 2011, with the number of children receiving food aid at school increasing by c. 500%. This growth appears to have arisen both as a result of acute food insecurity and drought, as well as from increasing awareness of the importance good nutrition has in promoting learning.

Seeking to further address concerns relating to hunger in schools, the MoE&HE and WFP have undertaken to provide meals to wide swaths of Puntlander children; plans have been submitted to feed 84,286 school children in 250 schools between 2015-2018.

Validating EMIS

Stakeholders indicated that efforts to register all schools in the state had been undertaken, and that these efforts had been successful. EMIS was therefore considered by some stakeholders to be a complete register of all schools in the state. However, in light of recent findings in relevant

development contexts (Tooley, 2009), the consultants sought to validate the extent to which it serves as an exhaustive record. The Education Mapping Tool was utilised in communities visited by enumeration teams; this tool asked randomly-selected members of the community to name all the schools in their area, and then whether they knew of, and could name, any unregistered schools in their area. The list of names was then validated against 2015 EMIS data.

12% of the schools named by stakeholders were not listed in the 2015 EMIS system. It may be the case that these institutions have been registered in the time since 2015, or that stakeholders were using an unregistered name for a registered institution. Seeking to address these concerns, extensive validation was undertaken by the consultants, working closely with the ministry; after this validation exercise was completed, 12% of named schools were not found on the 2015 EMIS database.

A number of reasons might explain this gap in EMIS coverage:

1. Some schools did not submit EMIS questionnaires, and the EMIS data was processed without them;
2. New schools have registered since the 2015 school year;
3. Some schools may be known by different names to local respondents; or
4. Some schools still remain outside the registration of the MoE&HE.

In any case, the EMIS system may need to be re-evaluated and validated by the MoE&HE and relevant partners in the interest of ensuring accurate and valid data is used to inform decision-making within the sector.

Demographic Factors Impacting on Education

Seeking to further understand the demographic context, and whether any relevant factors are impacting on the education sector beyond the overarching figures explored previously, a combination of primary and secondary data was collected and analysed. Where these surveys and findings provide additional context to the broad and overarching figures presented above, they are explored in more detail in the following pages.

Stakeholders across Puntland were asked to identify whether there were any demographic factors impacting on the education sector in Puntland; these stakeholders included high-level stakeholders, school teachers and leaders, and parents. Their responses were coded for frequency of response and analysed, with the following results:

Table 36 - Demographic Factors Impacting Education (Frequency Table)

	Frequency
<i>n</i> ⁹	95
Population growth and migration is placing pressure on educational resources	29

⁹ Irrelevant responses and 'I don't know' excluded from frequency table

An increasingly educated population is a good thing	15
Pastoralists remain underserved by the education system	13
Rural areas remain underserved by the education system	10
Poverty remains an important factor in people's ability to access education	10
Minority groups and clans are marginalised	8
Children with disabilities and special needs have difficulty accessing education	7
Only some parents can afford to pay fees	5
Coastal areas remain underserved by the education system	3
Droughts, the weather, and other challenges impact on peoples' ability to access education	3
IDPs have been placing pressure on educational resources, and remain underserved by the system.	2
There is high unemployment	2
Families are large, which limits the capacity of families to send all their children to school.	2
Security is an ongoing challenge	1
Teachers do not get paid on time	1
Large class sizes impact on educational quality	1
There is a lack of data on demographics, which impedes the capacity for evidence-based decision-making.	1
Boys take precedence over girls if parents are limited in how many children they can afford to send to school.	1
Some students cannot engage with the curriculum, as it is too challenging	1

The most frequently occurring consideration about the effects of demographic factors on education in Puntland, seen in 29 responses was that endemic population growth and migration are putting pressure on educational resources. Though distributed across different categories in the table, the second most frequent consideration was ways in which the financial insecurity and poverty of a large proportion of the population negatively impacts access to education. 10 respondents cited poverty as a barrier to access, 5 noted that parents couldn't afford fees and 2 cited high unemployment as an issue affecting education. Further important challenges in accessing high quality education were highlighted for specific demographic groups, namely pastoralists, cited in 13 responses, and those dwelling in rural areas, cited by 10 respondents. While some of these responses are not 100% relevant to the question, many are instructive and have guided further analyses of the secondary data.

The most pertinent points mentioned in the above table have been analysed in the following sections.

Population Growth

Specific uncontested data on Puntland's population and its rate of growth is difficult to come by. The World Bank has published statistics covering all of Somalia, indicating a population growth rate of 2.4% (World Bank, 2015). It is unclear, given Puntland's relative prosperity and stability, whether the population growth rate will be higher there due to IDP influxes and larger families, though there are some indications that this is indeed the case (World Bank, 2003).

There are some additional indications from primary interviews with some High Level Stakeholders that population growth due to refugee influxes has been slowing in recent years, as the conflict in South Central Somalia becomes less severe and famine appears to be abating. However, firm statistics and data on this were not available.

In light of large family sizes in Puntland (see later sections), combined with increasing stability and prosperity (Samantar, 2011), population growth in Puntland can indeed be seen as a significant factor impacting on the education sector. As the population grows, so too does the need for education provision.

Internal Migration

Internal migration was also seen by many as a significant driver of pressure on the education system. This migration was generally described as being rural-urban in nature, with migrants either seeking employment and opportunity in more-developed regions of the state, or with populations seeking to escape drought conditions and related hardship (a particularly salient challenge, in light of the recent drought in Puntland). A number of other studies have described these patterns and the rationales for them in greater detail (Osman, 2014) (Hall, 2015) (IOM, 2014); however, firm statistics on rates of migration and its specific impact on the education sector were not available. In spite of data gaps, however, it is thought that as more migrants arrive to regions with schools, demand and pressure on Puntland's existing educational resources will continue to grow.

Large Family Sizes

Large average family size was also seen to impact on the education sector in Puntland, generally in one of the following ways:

1. More children require more educational resources, placing pressure on limited availability in existing schools;
2. Parents frequently cannot afford to send all of their children to school.

One study placed the average family size in Puntland and Somaliland (including parents and children) at 7.2 (FSNAU, 2013); data collected for this study had similar findings, with average family sizes within each region reported as:

Parents – How many children do you have?

Table 37 - Average Number of Children / Family (ESA Survey Responses)

Ayn	4.2
Bari	5.6
Hayland	2.2
Karkaar	4.8

Mudug	4.6
Nugal	5.2
Sanag	2.5
Sool	4.3
Puntland average	4.3

The national averages found by the ESA study are broadly in keeping with the findings of other reports, though discrepancies and variation between regions may be explainable by a number of factors:

1. Other studies sought to establish ‘size of household’, which includes parents and other family members (e.g. grandparents, aunts and uncles, etc.);
2. The average given in the other study covered both Somaliland and Puntland, which may have pushed figures slightly higher; and
3. Relatively small samples were collected in some regions (Hayland and Sanag), which may have impacted on averages.

Primary data collected from parents found that for every additional child a parent had, it was 6.5% less likely they sent all of their children to school. This finding supports the view that larger families have more difficulty in educating all of their children.

In light of this primary and secondary data, it appears that traditionally large family sizes in Puntland are indeed having an impact on the education sector.

Urban-Rural Divide

An urban-rural divide was also described by many stakeholders, with rural areas relatively underserved by education and government services.

Table 38 - Urban-Rural Divide

	Percentage of total enrolment							
	2012 EMIS Enrolment		2015 EMIS ¹⁰ Enrolment		UNFPA 2014 Population Stats		2016 Puntland Government Stats.	
	Urban	Rural	Urban	Rural	Urban	Rural ¹¹	Urban	Rural
Ayn			49%	51%				
Primary	37%	63%	43%	57%				
NFE			72%	28%				
Secondary			100%	0%				
HEI			100%	0%				

¹⁰ The 2015 EMIS data was the most recent data Carfax were given access to that broke down enrolment by region and urban/rural location.

¹¹ Source: (UNFPA, 2014). The rural figures in this table include both rural and pastoralist population counts.

Bari			84%	16%	66%	34%	55%	45%
Primary	70%	30%	83%	17%				
NFE			27%	73%				
Secondary			96%	4%				
TVET			100%	0%				
HEI			100%	0%				
Buuhoodle							33%	67%
Gardafuu			53%	47%				
Primary			54%	46%				
Secondary			0%	100%				
Hayland			40%	60%				
Primary			42%	58%				
NFE			0%	100%				
Secondary			43%	57%				
TVET			100%	0%				
Karkaar			64%	36%				
Primary	65%	35%	62%	38%				
NFE			41%	59%				
Secondary			94%	6%				
TVET			100%	0%				
HEI			100%	0%				
Mudug			61%	39%	53%	47%	39%	67%
Primary	64%	36%	57%	43%				
NFE			50%	50%				
Secondary			77%	23%				
TVET			100%	0%				
HEI			100%	0%				
Nugaal			52%	48%	35%	65%	35%	65%
Primary	55%	44%	40%	60%				
NFE			43%	57%				
Secondary			75%	25%				
TVET			100%	0%				

HEI			100%	0%				
Sanag			36%	64%	29%	71%	21%	79%
Primary	42%	58%	32%	68%				
NFE			0%	100%				
Secondary			63%	37%				
HEI			100%	0%				
Sool			44%	56%	37%	63%	24%	76%
Primary	32%	68%	45%	55%				
NFE			8%	92%				
Secondary			84%	16%				
TVET			100%	0%				
HEI			100%	0%				
Grand Total			61%	39%	52%	48%	41%	59%

Across every region and nearly every level of education, there does indeed appear to be a substantial imbalance in provision, with urban areas having much more enrolment than rural ones. At a state-wide level, urban populations comprise 41% - 52% of the overall population, while holding 61% of the educational enrolment. However, across available primary data, there are indications that this divide may have been improving across most contexts since 2011.

The interplay between urban-rural dynamics and the education sector (particularly as it relates to quality, access, and equity), are addressed in more detail in the coming sections.

Pastoralists and Nomads

Pastoralists and nomads comprise a substantial percentage of the population of Puntland, and are therefore important to any analysis of education provision within the state. The terms (pastoralist and nomad) are frequently used interchangeably, as the most common cause for nomadism is the need to move livestock from one pasture or water source to another.

Table 39 - Pastoralists and Nomads Population (UNFPA 2014)

	Nomads as a % of Total Population (UNFPA 2014)	Nomads as a % of Total Population (2016 Puntland Government Survey)
Bari	20%	22%
Buudhoole	-	51%
Mudug	29%	35%
Nugaal	56%	47%
Sanag	65%	53%

Sool	58%	54%
Grand Total	44%	39%

The enrolment rate of pastoralists has been challenging to establish, given the transient nature of their communities. As such, only broad indications of enrolment rates have been identified by Ministry officials in interviews or in existing studies. One stakeholder indicated that only 15% of school-age pastoralist children are accessing education; however, it is unclear from where these statistics originated. One study undertaken by AET in 2008 found that only 5% of nomadic communities had accessed some form of education, generally non-formal in character (AET, 2008); interviews with stakeholders indicated that limited additional provision had been implemented for pastoralists in that time, so figures may not have shifted substantially since 2008.

Available data would appear to indicate that pastoralist communities remain a large and underserved segment of Puntland's population; a finding that may indicate an area of additional focus moving ahead.

The Puntland MoE&HE has identified a number of specific challenges facing pastoralist participation in the education sector; these have formed the primary focus of Ministry policy and planning in the pastoralist education space for the coming years.

Table 40 - Challenges Facing Pastoralist Participation in Education

Socio-Economic and Cultural Problems

- ❖ The long period of marginalization the pastoralist areas suffered in the past years, which was more acute than what was experienced by the other parts of the state;
- ❖ The down-trodden economic status of pastoralists that is mainly based on backward animal rearing practices and severely limits their capacity to support the education system financially and materially;
- ❖ The deterrent impact of mobility and low density of population that has made the building of infrastructures and social services (road, water, health, education, etc.) difficult and the consequent inability of addressing the educational needs of pastoralists through formal schools alone and high dropout rate of children, particularly girls, due to school distance;
- ❖ Low level of awareness on the importance of education and reluctance to send girls to school on the part of pastoralists that stem from a deep-rooted backward mind-set and harmful traditional practices;
- ❖ Occasional conflicts among different clans that arise from scarcity of pasture and water, and the subsequent displacement of families and dropping-out of school on the part of pupils;
- ❖ The vulnerability of pastoralist areas to repeated drought and food shortage which in turn forces pupils to drop-out of school in many areas where the problem is acute and a school feeding program is not put in place;
- ❖ The demand for child labour in the various economic activities of the family and household chores.

Human Resource Development Problems

- ❖ Potential capacity challenges on the part of the majority of officials and professionals at various levels of the regional education structure to execute their respective jobs efficiently;
- ❖ High turn-over of officials dedicated to pastoralist education;
- ❖ Shortage of qualified manpower at regional, district and school levels;
- ❖ Improper utilization of scarce regional resources;
- ❖ Challenges in supervision, planning, monitoring and evaluation system, and training deficiencies on the part of the professionals assigned for the activities;
- ❖ Shortage of teachers and unsatisfactory level of commitment on the part of teachers who are currently serving;
- ❖ Few teachers willing to live in the hard conditions found in these areas, resulting in teacher shortages as well as poorly motivated teachers;
- ❖ Absence of incentives that could be instrumental to employ teachers and other professionals in sufficient number and retain them in their work for a sufficiently long period of time.

Problems to Educational Management at Different Levels

- ❖ Challenges facing management bodies at regional and district levels to give due attention to the education sector in general and ABE in particular;
- ❖ Seek solutions to the problems of the sector on the basis of feedbacks obtained through monitoring and evaluation;
- ❖ Challenges to coordination and joint planning of concerned stakeholders in the special support offered by the Ministry of Education and Higher Education to pastoralist areas and the need to do more to strengthen the level of Coordination attained at present;
- ❖ Efficiency of capacity on the part of educational management bodies at various levels to mobilize the community for the development of the education sector;
- ❖ Limited representation of female in educational management positions.

Problems to Quality and Relevance of Education

- ❖ Limited availability of Educational delivery modes that are compatible with the way of life of pastoralists;
- ❖ Curricula designed for pastoralists does not fully take into account their socio-economic and cultural realities;
- ❖ Low quality of teaching-learning materials produced for primary education;
- ❖ Limited provision of the first cycle of primary education (Grades 1-4);
- ❖ Acute shortage of teaching-learning materials and teaching aids in primary schools in pastoralist areas.

Several programmes in recent years, most notably the Flexible Approach to Basic Education (FABE) and other similar initiatives have achieved success in smaller-scale undertakings; the lessons learned from these projects have informed development of future pastoralist-focused provision by both the government and international organisations. Building on the successes of

earlier programmes, the government has also recently set a national strategy for Pastoralist education, seeking to provide a range of educational provision and support to enable pastoralists to access education more readily:

Emphasis on Alternative Basic Education and Mobile Facilities
The government will endeavor to build new facilities for flexible education in areas frequented by nomads and pastoralists, and also seek to deliver education in tents and mobile facilities. The mode of provision will necessarily be flexible, given the varying demands on student time, and their presence in different parts of the state at different times of year. Additional attention will be paid to the recruitment of teachers from within communities themselves, seeking to minimize turnover of teaching staff.
Provision of Hostels
Puntland will also seek to provide hostels and boarding facilities for secondary students, enabling students to remain in one place to engage in secondary education while their families continue to move with the livestock.
Provision of Educational Radio Programs
The government will also seek to provide radios to pastoralist families, and develop learning content to be delivered by radio. This would include the distribution of corresponding learning materials to promote learning activities.

Gender

Women, while making some strides in recent years, appear to be facing some challenges in accessing education. Male-female enrolment ratios reported by EMIS data indicate unequal enrolment of women in the education sector:

Table 41 - Male-Female Enrolment Ratios 2015/16 (EMIS Database)

	Percentage of enrolled students	
	Male	Female
Primary	55%	45%
NFE	21%	79%
Secondary	64%	36%
TVET	33%	67%
HEI	60%	40%

Some areas of education (TVET and NFE) indicate higher percentages of enrolment, but enrolment in these subsectors is lower in absolute terms than other sectors.

Many qualitative responses indicated some of this overall gap in enrolment may be explainable by one of several factors:

1. In large families that must choose which child to send to school, boys may tend to be chosen over girls;
2. Girls are often expected to help their mothers around the house, minimising time available for study;
3. Marriage can often lead to girls leaving school in favour of homemaking.

Some Ministry stakeholders have also indicated, in discussions subsequent to primary data collection activities, that low standards of ‘female-friendly- facilities and role models may also be impacting on participation rates; however, primary data did not offer substantial insight into this area.

Issues of gender in education will receive more detailed analysis in the next pages, but initial analysis of the qualitative and quantitative data points to unequal participation of girls in the education sector.

Availability of Demographic Data

As one high-level stakeholder mentions (an informant from the ESC), there is a substantial gap in available demographic data, particularly as it relates to the education sector. Statistics on minority groups, family sizes, income, etc., recorded against educational participation and performance, were not available. Nor was data on how well these groups are being served within the current system (aside from broad figures offered by international sources, and limited data in EMIS systems).

Other Factors

Other factors mentioned by stakeholders as demographic concerns (i.e. IDPs, pastoralists, minority groups, etc.) are dealt with in more detail in other sections of this analysis.

Humanitarian Factors Impacting on Education

Humanitarian factors were also addressed within the stakeholder survey. Informants identified the following areas as being particularly and chronically salient:

Table 42 - Humanitarian Factors Impacting on Education (Frequency Table)

	Frequency
<i>n</i> ¹²	161
Poverty / inability to pay school fees or food	34
Civil war and inter-community conflict	32
Drought, floods, storms, and environmental disasters	32
IDPs and other migrants	20
Girls are not sent to school or get married early	8
Disabled students cannot access education	8
Pastoralists do not get access to the same levels of education provision	6
Many families do not understand the importance of education	5

¹² Irrelevant responses and ‘I don’t know’ excluded from frequency table.

Economic challenges (undescribed)	3
Children often work, and it prevents them from participating in education	3
Discrimination challenges	3
Corruption and nepotism	2
Rural / urban divide	2
Poor coordination among education partners	2
Cultural challenges	1
Poor sanitation	1
Family challenges	1
Poor standard of teaching / education	1

Poverty was highlighted as the greatest challenge humanitarian for access to education, cited in 34 responses. However, cited almost as frequently were the negative effects of war and conflict in the region as well as the challenges posed by natural disasters. These factors were each mentioned 32 responses. Also of note were the high number of respondents who mentioned the impact of IDPs and other migrants on education, this echoes the concerns about population growth and the capacity of education infrastructure to grow to meet it, that were found in responses to the question about demographic factors. The most pertinent points mentioned in the above table have been analysed in the following sections.

Poverty

Somalia as a whole remains the fifth-poorest country in the world (World Bank, 2016), though there are some indications that Puntland is faring somewhat better, with the average Puntlander's Purchasing Power Parity (PPP) reportedly equalling that of the average Indian's (Samantar, 2011). Nonetheless, Puntland continues to face a number of challenges stemming from and relating to poverty, particularly in rural and less-developed regions of the state. Poverty appears to be having a demonstrable impact on the education sector, with the most commonly cited reason for children being out of school being an inability to pay school fees – see the 'Access' section of this document for further analyses.

Hunger

Hunger was also widely cited as a challenge facing the education sector, often alongside challenges in paying school fees. Recent drought appears to be exacerbating concerns relating to hunger, particularly in rural areas – the UN estimated that 385,000 people in Somaliland and Puntland are in immediate need of food aid due to the ongoing crisis (WFP, 2016). In selected documents submitted to the consultancy team, the WFP has also indicated that hunger may be a primary cause of school dropouts, and other education-related challenges.

Civil War and Armed Conflict

The ongoing armed conflicts with Al Shabaab, as well as with Somaliland in Sool and Sanaag regions, appear to be having an impact on the education sector. Once again, firm statistics on the impact these conflicts have on education within Puntland are difficult to come by, however many

stakeholders indicated they saw this impacting directly on the sector. Some of the most-widely cited issues include the continued presence of IDPs, schools closing because of conflict, teachers fleeing because of conflict, and other related factors placing pressure on education provision.

Separate to these politically-oriented conflicts, some stakeholders mentioned highly localised inter-clan armed conflicts closing schools for unspecified stretches of time. It was unclear from these responses how frequent or long such closures were, but they seemed to be sufficiently important that a number of stakeholders in different regions described them.

On the basis of the above it seems that conflict continues to have an impact on the education sector, though substantial improvements to the situation appear to have been achieved in recent years.

Drought, Storms and Environmental Disaster

Drought and other environmental disasters were commonly mentioned by stakeholders as impacting on the education sector; it was generally seen to be a primary driver of migration from rural to urban areas – either because more economic opportunity or humanitarian aid was available in those areas. The 2016 drought was cited as being a particularly pressing issue in the current period. This in turn places pressure on available educational resources within urban areas, while impacted rural zones have been reported as nearly abandoned, with the already limited schools shut as teachers and staff are also forced to urban areas. Such closures are thought to impact substantially on the sustainability of provision, with teachers reluctant to return once drought or floods abate.

IDPs

IDPs are thought to include those fleeing conflict and drought from South Central Somalia, as well as those from Puntland seeking relief from drought and related environmental disasters. The challenges posed to the education sector by IDPs is therefore quite similar to internal migration; a number of other studies have described these patterns and the rationales for them in greater detail (Osman, 2014) (Hall, 2015) (IOM, 2014); however, firm statistics on rates of migration and its specific impact on the education sector were not available.

While comprising only 6% of Puntland's total population, the presence of these IDPs continues to place pressure on the education system, while many IDPs continue to face challenges in educational access.

Questions posed by the ESA team within the school data form were asked with the intent of establishing what percentage of students in each institution were IDPs:

**IDPs as a Percentage of Puntland's Population: 2% (2016 Puntland Government Statistics)
- 5% (UNFPA, 2014)**

Table 43 - IDPs as a Percentage of Visited School Populations (EMIS Database and ESA Data)

	% of population
HEI	0.30%
NFE	4.96%
Primary	7.77%

Secondary	0.11%
TVET	34.89%

It appears that IDPs are relatively well represented in Primary and NFE provision, though access to Higher and Secondary education appears to be a challenge. The relatively high prevalence of IDPs in TVET is not thought to be representative of the TVET sector as a whole, given the relatively small sample of institutions visited. However, given that most TVET is project-based, and is often targeted at disadvantaged individuals in Puntland (George & Jama, 2013), it may well be the case that IDPs are better represented within TVET than in other sectors.

Other Factors

Other factors mentioned by stakeholders as humanitarian concerns (but not addressed here or in previous sections) are dealt with in more detail in other sections of this analysis.

Socio-Economic Factors Impacting on Education

Socioeconomic factors were also explored within the stakeholder survey. Informants identified the following areas as being particularly salient:

Table 44 - Socio-Economic Factors Impacting on the Education Sector (Frequency Table)

	Frequency
<i>n</i> ¹³	244
Poverty and challenges paying fees (often leading to teachers leaving school)	184
High unemployment	30
Girls excluded (in favour of boys)	15
Conflict, IDPs, and migration	15
Drought	9
Cultural challenges	6
Pastoralists and nomadism	6
Coastal and rural communities isolated	2
Islamic influence	1
High population density	1
Poor administration	1

As well as being the humanitarian factor most frequently cited as impacting education, poverty also constitutes the socio-economic factor most frequently cited as impacting education, cited in

¹³ Irrelevant responses and 'I don't know' excluded from frequency table.

184 responses, far more than any other consideration. The 30 responses that mentioned high unemployment also indicate the extent to which challenges regarding livelihoods, create challenges for education. Also of note are the large number of responses, 15 citing the issue of exclusion of girls.

The most pertinent points mentioned in the above table have been analysed in the following sections.

Unemployment

Unemployment was broadly seen as one of the primary contributing factors to poverty; studies have estimated the unemployment rate to be 54% for 15-64 year olds, while the youth unemployment rate is estimated at 67% (UNDP, 2012). Such high rates of unemployment are likely to make paying school fees challenging for many families. These concerns link to high rates of poverty described by many families in survey responses. Some steps have been taken in recent years to address challenges in unemployment through the provision of increased TVET, and drafting of relevant government policies guiding the sector; some evidence exists that these may have had positive impacts on trainee employment. At present, however, provision remains limited across the state.

Teacher Retention

Unemployment and poverty, leading to challenges in paying school fees, was seen by many to cause difficulty in teacher retention; teachers may leave schools in areas of high poverty and unemployment in search of schools that can afford to pay fees. Such occurrences are likely to impact negatively on the sustainability and impact of educational interventions in many parts of the state. Teacher turnover was similarly identified as an ongoing challenge in documentation submitted to the ESA team, namely within the revised ESSP and related policy documents.

In recognition of these challenges, the GPE recently authorised substantial incentive payments to teachers throughout the state. It is unclear, on the basis of available data, what impact, if any, these incentives have had on teacher turnover and retention (or, indeed, on pupil attainment and progress).

Child Labour

Statistics on the prevalence of child labour were available across all Somalia, with Puntland-specific statistics a challenge to find. Care must be undertaken in interpretation of the below data, as organisations undertaking analyses of child labour define it broadly, as any child of school age dedicating substantial portions of their time to work. However, within the Somali context, children's contribution to family livelihoods are important; they often need to work so that families can eat and sustain themselves. As such, a child engaged in work (esp. pastoralist or agricultural work) is not necessarily an indicator of exploitation, but more likely an indication of need and poverty.

However, available data does appear to cast some light on the prevalence of child labour in Somalia:

Child labour statistics in Somalia

Table 45 - Child labour statistics in Somalia (Bureau Of International Labor Affairs, 2014)

	(% and population)
Working children, ages 5 to 14:	39.8 (1,012,863)
School attendance, ages 5 to 14:	48.9
Children combining work and school, ages 7 to 14:	20.2

These statistics also included the areas in which children are most likely to be employed:

Table 46 - Child Labour Areas (Bureau Of International Labor Affairs, 2014)

Sector/Industry	Activity
Agriculture	Threshing grain
	Digging
	Herding livestock
	Fishing
Industry	Working in construction, including digging
	Working in mines and quarries, including breaking rock for gravel
Services	Street work, including begging, transporting goods, shining shoes, washing cars, conducting minibuses, and selling cigarettes, <i>kbat</i> , sweets, and toothbrushes
	Domestic work
Worst Forms of Child Labor	Used in armed conflict, sometimes as a result of forced recruitment, including to plant explosive devices, operate checkpoints, serve as human shields and suicide bombers, conduct assassinations, transport weapons, and provide intelligence and logistical support
	Forced labor in domestic service, agriculture,* livestock herding,* breaking rock for gravel,* selling or transporting <i>kbat</i> ,* and construction work,* each sometimes as a result of human trafficking
	Commercial sexual exploitation sometimes as a result of human trafficking

Rates of child participation in the workforce appear to be high across the country, potentially impacting on the rate of participation in education.

Qualitative responses also indicated that IDP families were particularly reliant on sending their children to work, given higher rates of poverty and need of family revenue generation. However, firm statistics on this phenomenon within IDP families were not available.

In any case, it appears that child labour practices are having a substantial impact on the education sector. Some steps, as noted below, have been undertaken to address this, with increasing flexible ABE and NFE provision for those children engaged in work.

Other Factors

Other factors mentioned by stakeholders as socioeconomic concerns (but not addressed here or in previous sections) are dealt with in more detail in other sections of this analysis.

Political Factors Impacting on Education

Political factors were also explored within the stakeholder survey. Informants identified the following areas as being particularly salient:

Table 47 - Political Factors Impacting on Education (Frequency Table)

	Percentage
<i>n</i> ¹⁴	95
Armed conflict and civil war	27
Policy and administration (potential)	14
Prioritisation of security over education and insufficient allocations to education	8
Lack of political stability / collapse of federal government	8
Dispute with Federal Government	7
Ministerial turnover and political interference impacting capacity	6
Dispute with Somaliland	6
Inter-clan relationships	6
Need to standardise curriculum	1
FPE shift impacting negatively on quality	1

Informants most frequently identified armed conflict and civil war as a political factor impacting education. Respondents also indicated that the risk of mal-governance and/or bureaucratic obstacles could be another significant factor. Other frequently-mentioned factors included the prioritisation of security over education (8 respondents), a lack of political stability (8), disputes with the Federal Government or Somaliland (7 and 6, respectively), ministerial turnover (6), and inter-clan relationships (6). The most pertinent points mentioned in the above table have been analysed in the following sections.

The most pertinent points mentioned in the above table have been analysed in the following sections.

¹⁴ Irrelevant responses and 'I don't know' excluded from frequency table.

Policy Improvements and Challenges

While many improvements to policy in recent years were cited by stakeholders, so too were ongoing challenges in the policy and administration space. Improvements mentioned by stakeholders included:

- ❖ Improving administrative capacity; and
- ❖ Improving policy and governance within the sector.

Ongoing challenges cited by stakeholders included:

- ❖ Growth in administrative capacity is required to effectively administer the whole of the education sector; and
- ❖ Strengthened meritocratic hiring practices and policies have the potential to greatly improve institutional capacity.

Such challenges were seen by stakeholders at nearly every level to be actively impacting on the education sector.

Administrative Overlaps

Territorial disputes with neighbouring states were mentioned by many stakeholders to be a challenge. Such conflicts were seen to potentially be driving many from their communities or homes, impacting negatively on their ability to participate in education.

In other cases, stakeholders indicated that multiple state governments (and Ministries of Education) were attempting to exercise overlapping control over schools and educational institutions within the disputed zones. At times, this included funds and budgetary allocations from both governments, but more often attempts at administration and regulation by both governments led to apparent confusion and frustration on the part of local stakeholders. Such challenges appear to be ongoing, and unlikely to be resolved quickly.

Lack of Data on Inter-Clan Relationships

Several commentators have identified strong clan groups as forming the basis for Puntland's relative peace within Somalia (Ali, 2015). However, potential exclusion of minority clan groups from education provision and political decision-making was cited as a potential, though unvalidated, concern. It must be noted that the government of Puntland has taken substantive steps toward addressing this issue in recent years; discrimination within the education sector on the basis of clan is against national policy.

There is limited data on clan composition and participation within the education sector or political life more broadly, impeding more in-depth analysis of whether discrimination on the basis of clans does exist. Such data gaps can be seen to result from taboos on discussing matters of clan, ethnicity, and origin; many enumerators and key informants expressed extreme discomfort and aversion to discussing these matters, making collection of reliable data challenging. However, if issues of participation and equity of access are to be understood and addressed, these matters will have to be studied in more detail.

Other Factors

Other factors mentioned by stakeholders as socioeconomic concerns (but not addressed here or in previous sections) are dealt with in more detail in other sections of this analysis.

Government Commitment to Education

Perceived government commitment within the education sector was explored with both high level stakeholders and school teachers and leaders.

Figure 2 - High-level stakeholders

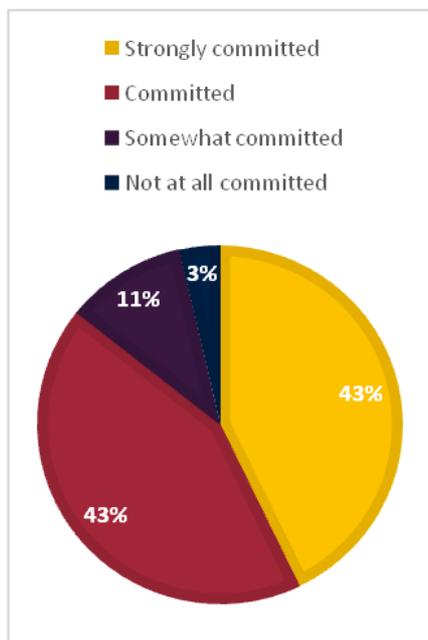
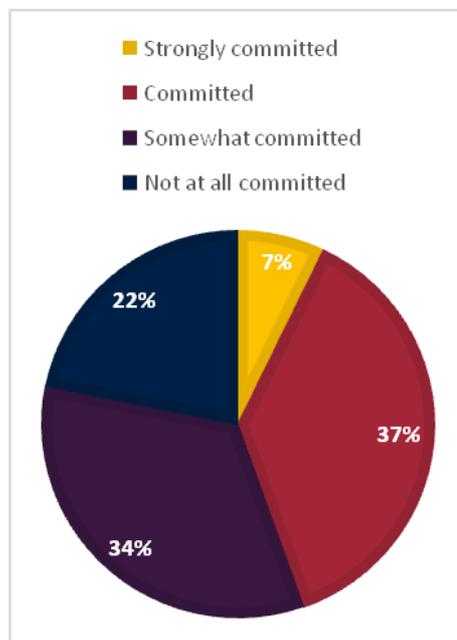


Figure 3 - School leaders and teachers



86% of high-level stakeholders (broadly comprising a combination of Ministry officials and education partner stakeholders) indicated the government was either committed or strongly committed to education. However, on-the-ground stakeholders (largely school teachers and leaders) gave a different assessment, with 44% indicating they believed the government to be committed to the education sector. This disconnect appears to be broadly indicative of different understandings of commitment and impact on the part of these different groups.

Stakeholders were asked to identify the reasons for their evaluations, with the following results:

Strongly committed and committed

Table 48 - Reasons for Stakeholders' Evaluations - Strongly Committed and Committed (Frequency Table)

	Frequency
	n ¹⁵ 150
Resources have been improving, but there are still gaps	24
Allocations to education are increasing	10
Control of the education system is improving	2

¹⁵ Irrelevant responses and 'I don't know' excluded from frequency table.

Education has been improving here	1
The ministry is dedicated	1

Those indicating a high level of commitment cited the above factors, either stating that government budgetary allocations to education were increasing, or that standards and activities had been improving in recent years. A substantial percentage of stakeholders still indicated there was room for improvement. It appears then that relatively positive evaluations of commitment looked at inputs and increases of activity, using these to justify positive assessments.

Somewhat committed and not at all committed

Table 49 - Reasons for Stakeholders' Evaluations - Somewhat Committed and not at all Committed (Frequency Table)

	Frequency
<i>n</i> ¹⁶	144
Lack of adequate resources and/or capacity	82
Higher education is still private	2
Allocations to education are increasing, but still are not enough	1
The ministry visits our school	1

Those giving less-positive evaluations cited poor capacity or allocation of resources as the primary cause for concern, indicating these stakeholders still found government provision and administration wanting.

The different evaluations offered by these groups is insightful – government officials appear to emphasise input and activity, while those on the ground pointed to overall capacity, impacts, and outcomes. Such findings may indicate a need for a change of government focus to impact (away from activity) as a primary measure of success.

¹⁶ Irrelevant responses and 'I don't know' excluded from frequency table

Access and Equity – Overview

The topics of access and equity were explored both in primary research and secondary data; this section primarily seeks to focus on insights offered by primary data collection activities, and review of relevant secondary data, and provides a system-wide analysis of these areas. Primary and secondary data has been synthesised in subsector analyses, allowing for more comprehensive analyses where appropriate and feasible.

Given that Access and Equity are often highly interrelated, they are explored together. This research yielded interesting findings which are anticipated to guide ESSP development moving ahead.

Reasons for Children Being Out of School

Respondents were asked whether there was a type of child or person who had difficulty accessing education, and whether they personally knew any children that were not in school, with the following results:

Figure 4 - Is there a type of person or child who faces challenges in accessing education?

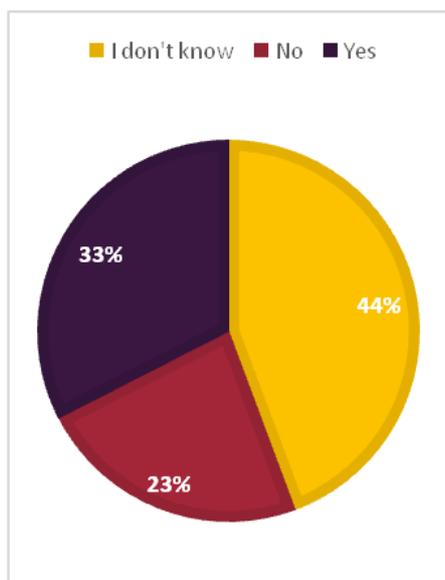
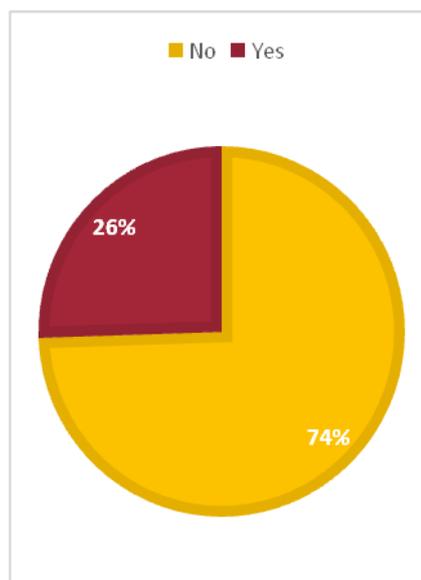


Figure 5 - Do you personally know any children who are not in school?



33% of those offering responses to this question indicated there was indeed a type of child or person who faced challenges in accessing education. Only 26% indicated that they personally knew children out of school, which may indicate that data collection was carried out within communities possessing a higher degree of access to education than the national average. Nonetheless, supporting qualitative responses were analysed for patterns, with informants identifying the following categories:

Table 50 - Reasons for Children Being Out of School (Frequency Table)

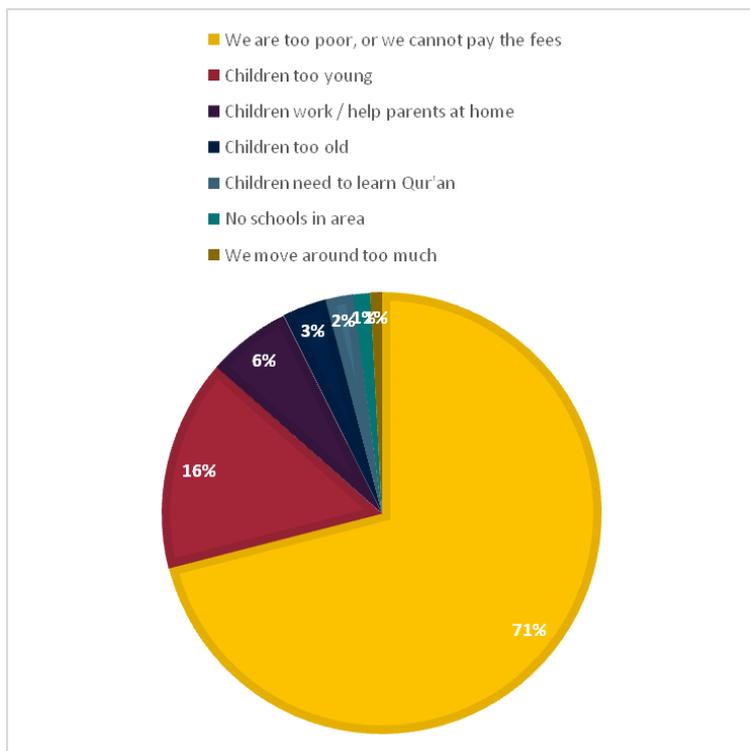
	Frequency
<i>n</i> ¹⁷	1,145
Poor children and orphans	828
Disabled children, or those with special needs	115
Pastoralist and nomadic children	53
Family problems / uneducated families or families that do not value education	58
Rural children	49
Minority children	34
Girls	33
IDPs and migrant children	32
Dropouts (undescribed)	75
Work or family responsibilities	34
Lack of educational resources or available schools	9
Those suffering from drought and humanitarian crises	15
Illness in family	5
Early marriage	4
Language barrier preventing them from engaging with	3
Coastal communities	4
Those from large families	2
Academic challenges	1
Security	2

Familiar themes of poverty, disabled children, pastoralists, girls, IDPs, migrant children, and children from minority groups featured highly here. These responses and groups will be analysed in more detail in the coming sections.

Parents of children out of school, and children out of school, were also asked to describe why it was they were not enrolled, with the following results:

¹⁷ Irrelevant responses and 'I don't know' excluded from frequency table

Figure 6 - Parents' Reasons for Children Being Out of School



These responses were generated by parents indicating they had children out of school. The most common response (71%) was that they simply could not afford to pay the fees, followed closely by their children were too young, and children needed to work to help support or care for families. This would appear to support previous findings on reasons for children being out of school, pointing to poverty and child labour as the primary barriers to children’s education.

Perceived Standards of Access

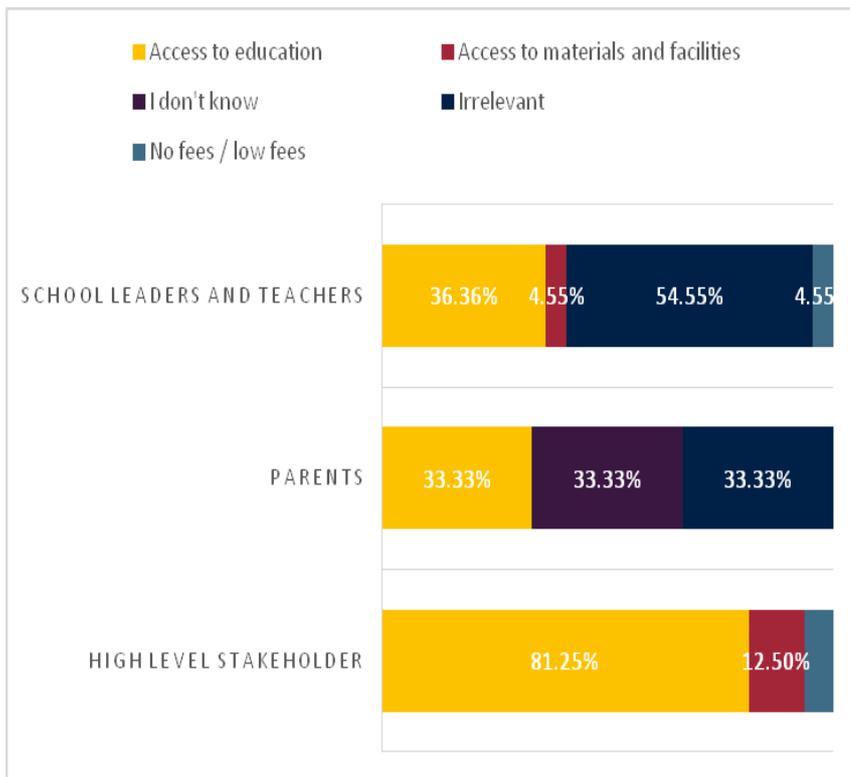
Stakeholders were also asked to define their understanding of ‘Access’ within educational contexts. Definitions were found to fall into four distinct categories:

Table 51 - Definitions of ‘Access’

Irrelevant responses	These responses were generally found to either be simple restatements of the definition (e.g. ‘It is access’), or irrelevant to the question (e.g. ‘Yes’ or ‘It’s my’).
Access to education (for all in Puntland)	These definitions were broadly in keeping with this definition: ‘In education, the term access typically refers to the ways in which educational institutions and policies ensure—or at least strive to ensure—that students have equal and equitable opportunities to take full advantage of their education’ (GER, 2014).
Access to materials and facilities	This definition broadly focussed on provision of school facilities or books as being the core definition of access; it is thought that these definitions are tangentially in-line with the core definition of access, though not sufficiently to be included within the above definition.

<p>No fee or low-fee provision</p>	<p>This definition was purely focussed on the provision of no-fee or low-fee education. Once again, these definitions are tangentially in-line with the core definition of access, though not sufficiently to be included within the above definition.</p>
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Figure 7 - Perceived Standards of Access

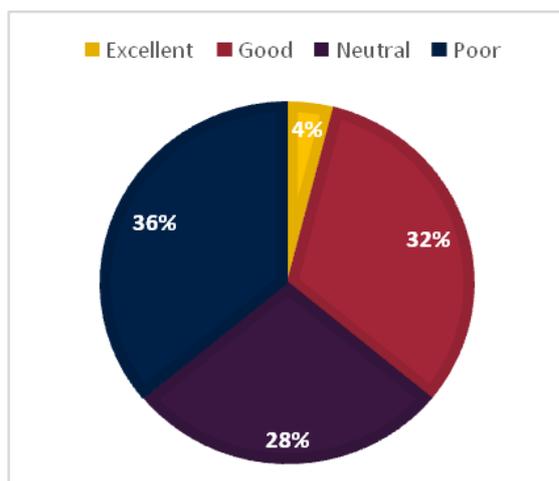


High-level stakeholders broadly defined Access in keeping with accepted definitions, while only 33-36% of school leaders, teachers, and parents gave definitions in line with accepted meanings. School leaders, teachers, and parents broadly gave either 'I don't know' replies, or irrelevant responses.

Stakeholders were then asked to evaluate the standard of access at their institution. Their responses were only evaluated and presented in the tables below in the case that they were found to define access in keeping with accepted definitions.

High-Level Stakeholders

Figure 8 - High-Level Stakeholders' Evaluation of the Standard of Access



60% of high level stakeholders offering responses to this question evaluated the standard of access at their institution as being 'Neutral' or 'Poor', indicating wide dissatisfaction with the standard of access at in Puntland's education sector. Qualitative responses supporting these evaluations were also given:

Table 52 - Reasons for Excellent & Good Evaluations (Frequency Table)

	Frequency
<i>n</i>	9
Access is improving	5
Low rate of access (low percentage of school-age population in school), though things have been improving	2
We are building more facilities	1
Resources are still limited	1
We have plans for improvement	1
Coordination is strong	1
Limited pastoralist provision	1
We are increasing teacher numbers	1
We have good education programmes	1
Most people have access to education	1
We have a policy on education access	1

Those indicating excellent or good access cited improvements in access as a rationale for their evaluations, though some stakeholders still pointed to substantial shortfalls. It appears then that the positive evaluations are pointing to improvements, rather than the overall standard of access in the education sector.

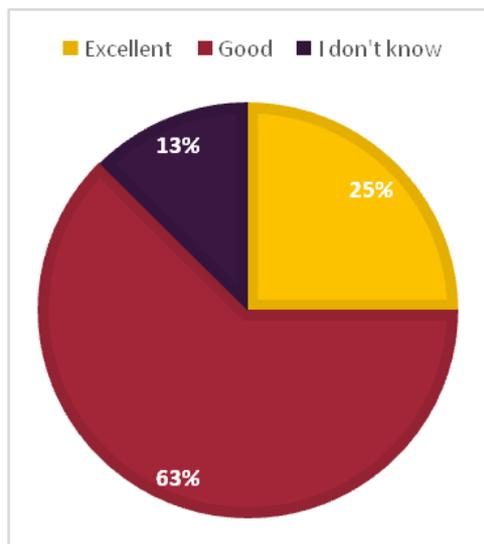
Table 53 - Reasons for Neutral & Poor Evaluations (Frequency Table)

	Frequency
<i>n</i>	14
Low rate of access (low percentage of school-age population in school)	8
Limited pastoralist provision	4
Many communities have no education provision at all	3
Resources are limited	1
Many children do not have access to education	1
Government and leadership has limited capacity	1

Those indicating substandard access made similar points to those making positive appraisals, pointing to low enrolment rates across Puntland, poor provision for pastoralists, and challenges in extending education to all communities in the state.

School Leaders and Teachers

Figure 9 - School Leaders' and Teachers' Evaluation of the Standard of Access



The majority of respondents within this category thought access was good or excellent, though they comprised only 8 respondents. Only two supporting qualitative responses were submitted:

Table 54 - Reasons for Evaluations (Frequency Table)

	Frequency
<i>n</i>	2
This is a public school	1
Access is good because we have plans for improvement	1

In one case, the respondent indicated access was good because theirs was a public school, or good because they had plans for improvement.

Across all of the above analyses, it appeared that many lower-level stakeholders had a poor understanding of 'Access'. However, a number of themes did emerge from the data: poor resource availability (on the part of families, NGOs and the government) appears to be impacting negatively on rates of enrolment; there appears to be poor access for pastoralists and other marginalised groups; and that things have been improving in recent years.

Perceived Standards of Equity

Respondents were asked to first define their understanding of Equity with the education sector, and then to give their appraisal of the standard of equity in education. Given definitions fell within the following broad categories:

Table 55 - High Level Stakeholders' Perceived Standards of Equity (Frequency Table)

High Level Stakeholder	<i>(n 32)</i>
Equality of opportunity	53%
Equality of opportunity (gendered focus)	22%
Equality of access	9%
Availability of resources and materials	6%
Irrelevant	6%
Justice and fairness	3%

53% of stakeholders indicated an understanding of equity that sought to include equality of opportunity for all people in Puntland, not just for a single group. While 22% indicated that their understanding of equity was limited to the promotion of equal opportunities for boys and girls, making no mention of other groups in the state.

Table 56 - School Leaders' and Teachers' Perceived Standards of Equity (Frequency Table)

School Leaders and Teachers	<i>(n 309)</i>
Equality of opportunity	43%
Equality of opportunity (gendered focus)	20%
Availability of resources and materials	10%
Irrelevant	9%
Equality of access	6%
Justice and fairness	6%
Equal education	2%
Equity (general)	1%
Quality of education	1%

School teachers and leaders meanwhile indicated a similar focus on equity of opportunity, with a substantial percentage again indicating their understanding of equity was limited to a gendered focus.

This finding may indicate that efforts to improve equity within the education sector have been limited in some cases to the promotion of equity between boys and girls, with limited focus on other disadvantaged groups.

Stakeholders were then asked to evaluate the standard of equity in the education sector:

Figure 10 - High Level Stakeholders' Evaluation of the Standard of Equity

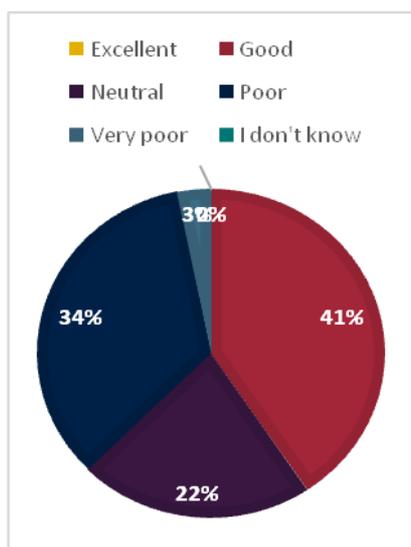
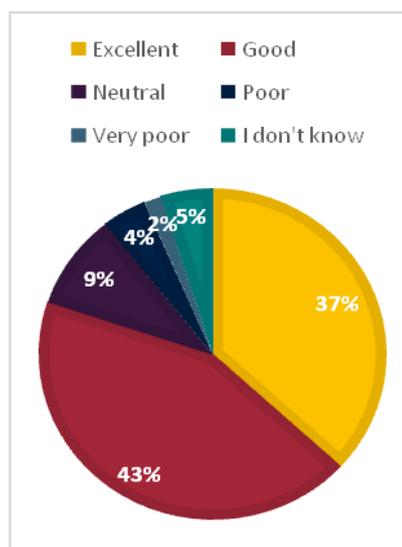


Figure 11 - School Leaders' and Teachers' Evaluation of the Standard of Equity



z

56% of high level stakeholders indicated equity was neutral or very poor, with lower-level stakeholders indicating that the standard of equity was better (80% good or excellent). Supporting qualitative responses comprised the following:

Table 57 - Reasons for Positive Evaluations (Frequency Table)

	Frequency
<i>n</i>	106
Diverse groups are participating in education	60
Discrimination concerns have been addressed	54
Girls are getting more opportunities	15
Male-female enrolment figures cited	13
Parents are aware of importance in educating both boys and girls	4
All people get equal opportunities	2
Awareness (unexplained)	2
Boys in this community work/migrate while girls go to school	1
Availability of resources is a challenge	1
We have policies seeking to address equity concerns for boys/girls	1
Ministry shifting focus to remote and coastal areas	1
Minority groups now getting more attention	1
This school is free	1

Many are still unable to access education	1
--	----------

Those giving positive appraisals of equity broadly focussed on the fact that diverse groups were participating in education, in many cases with a focus on girls gaining more opportunity. A number of challenges were still identified in spite of cited improvements (namely that many were still unable to access education).

Table 58 - Challenges to Standards of Equity (Frequency Table)

	Frequency
<i>n</i>	16
Many girls still do not get same opportunities	10
Many are still unable to access education	3
Girls are getting more opportunities	2
Male-female enrolment figures cited	2
Some regions receive less funding	2
Diverse groups are participating in education	1
Boys in this community work/migrate while girls go to school	1
Availability of resources is a challenge	1
Boys are still preferred to girls	1
Many groups remain marginalised	1
Disabled students still struggle to access resources	1

Those giving negative appraisals generally focussed on the lack of opportunity for girls and a number of other groups, while some pointed explicitly to those with special education needs and disabilities as being at a particular challenge. However, negative appraisals appeared to focus largely on male-female equity, with limited attention paid to other potentially marginalised groups.

Across these findings, it appears that the focus of many within equity is on male-female equity, ignoring some of the equity-related challenges relating to the urban-rural divide, IDPs, minorities and other marginalised groups. This may be instructive in guiding later recommendations and analyses.

Areas of Focus in Equity and Access

Across the previous analyses of equity and access, a number of patterns have begun to emerge. These patterns are thought to indicate areas in which to focus further analyses:

1. Limited resources and provision
2. Poverty and joblessness

3. The urban-rural divide
4. IDPs and migrants
5. Girls and women
6. Child labour
7. Clan politics and minority groups
8. Political and armed conflict
9. Special education needs
10. Pastoral and coastal communities.

Sector-Level Evaluations

A number of quality indicators were measured across the schools visited, and drawn from the provided secondary data. For ease of reference, these indicators have been used to analyse school performance across each subsector, and focus on the following areas:

1. Quality of instruction, as measured by:
 - a. Percentages of trained vs untrained teachers;
 - b. Observed instructional quality;
 - c. Presence of educational materials in classrooms;
 - d. Teacher subject knowledge.
2. Pupil performance on basic literacy and numeracy examinations;
3. Standard of facilities.

Please note that the above analyses were undertaken where data and sample sizes allowed.

Evaluating Observed Quality of Instruction - Scoring

Lesson observation forms also included an area for evaluation of instructional quality; the areas evaluated comprised:

1. Teacher has good subject knowledge
2. Lesson goals are clear
3. Expectations of learners are clear
4. Good use of resources and materials
5. Teacher knows their students and their needs
6. Teacher adapts to meet individual pupil needs
7. 'Learning to learn' strategies are taught and practiced in class
8. Teacher gives individual students guidance and feedback
9. Cross-curricular learning is achieved
10. Teacher accepts responsibility for learner outcomes
11. Instructor manages classroom behaviour well

These areas have been identified by a wide range of studies to have a demonstrably positive impact on pupil learning outcomes (Ko, Sammons, & Bakkum, 2013). Furthermore, they comprise a list of behaviours which are easily validated, and do not rely on more intuitive and qualitative measures of instructional quality. As such, the scores used to mark these areas of practice, and their corresponding number values, were given as such:

1. Exceeded (4) – the instructor went above and beyond the minimum practical requirements in this area, and showed outstanding practice.
2. Met (3) – the instructor met the minimum practical requirements in this area.
3. Partially met (2) – the instructor made some attempts within this area, but did not meet the minimum practical requirements.
4. Not met (1) – no attempts were seen in this area at all.

A passing score within this rubric is a 3 for each area of practice; a mark of three indicates that instructors are meeting basic minimum standards of pedagogical practice.

Evaluating Observed Quality of Facilities - Scoring

Lesson observation forms additionally provided a space for enumerators to evaluate the standard of facilities in visited schools. Enumerators evaluated facilities as being either Good (4), Acceptable (3), Poor (2), or Very Poor (1). Once again, a passing mark comprises '3'. Enumerators were also asked to make qualitative comments on what in classrooms was missing, or required improvement. These responses were collated and analysed in the following sections.

Literacy Assessment - Scoring

Letter Identification

l	a	B	i	h	Y	c	u	d	Z	E
---	---	---	---	---	---	---	---	---	---	---

Students were required to phonetically pronounce a set of 100 total letters of the Somali alphabet. Students were given 60 seconds to complete the entire exercise.

Invented Word

l	tej	si	gim	tig	waj
---	-----	----	-----	-----	-----

Students were required to phonetically read out a set of 50 invented words made up of Somali alphabet letters. Students were given 60 seconds to complete the entire exercise.

Reading Comprehension - Basic

Waxaa	jiri	jiray	qoys	danyar
ah	oo	ku	noolaa	meel
miyi	ah.			

Qoyska danyarta ahi xagee ku noolaayeen? ((miyi))

Correct

Incorrect

No answer

Students were presented with a short passage comprising 64 words and were then tasked with answering five separate multiple-choice questions related to the text they had just read.

Reading Comprehension - Intermediate

Aamina	walaasheed	baa	la
markaa	waxa	ay	rabtay
ay	ka	qaybgasho	arooska
si	ay	uga	buraanburto.

Yaa la aroosayay? ((Aamina walashed))^[SEP]

Correct

Incorrect

No answer

Students were presented with a longer passage comprising 143 words and were then tasked with answering six separate multiple-choice questions related to the text they had just read.

Numeracy Assessment - Scoring

Counting Numbers

● ● ● ● ● ● ● ● ● ●	How many?
---------------------	-----------

To undertake this task, the student was presented a linear display of circles, which the student had to tally and consequently write down the total number. There were five separate lines in total that the student had to tally.

Read the Number

95	48	83
----	----	----

To carry out this task, the student, presented with six separate two-digit numbers, was asked to identify each number out loud.

Comparing Number Values

46	or	79
----	----	----

The questions in this section asked students to identify six separate value comparisons between two-digit numbers.

Addition

$$\begin{array}{r} 13 \\ + 65 \\ \hline ? \end{array}$$

Students were responsible for solving five basic sums, consisting of both single-digit and double-digit figures.

Subtraction

$$\begin{array}{r} 48 \\ - 24 \\ \hline ? \end{array}$$

Students were responsible for solving five basic subtraction problems, consisting of double-digit figures.

Multiplication

$$8 \times 4 = ?$$

Students were responsible for solving five basic multiplication problems, consisting of single-digit figures.

Division

$$10 \div 2 = ?$$

Students were responsible for solving five basic division problems, consisting of both single-digit and double-digit figures.

Additional Assessment Data

Additional data from the Monitoring Learning Achievements (MLA) and EGRA Assessments undertaken by partner institutions have also been included in the relevant sections below.

Overview of Assessment Data Collected

A brief overview of collected assessment samples, broken down along gender and urban/rural lines, can be found below:

Table 59 – Literacy and Numeracy Assessments Undertaken - Male / Female and Rural/ Urban

	Frequency							
	Literacy Assessments				Numeracy Assessments			
	F	M	Rural	Urban	F	M	Rural	Urban
NFE	106	11	81	36	179	20	114	86
Primary	326	312	341	284	572	644	449	730
Secondary	37	51	43	32	32	41	29	44

Early Childhood Education

Early childhood education remained a challenge to evaluate throughout this study. JRES, action plan, and evaluation documents all indicated this sector remains under-studied and under-developed, with limited data held by either the Ministry of Education, or education partners. Furthermore, many plans appear to have been made to improve understanding, quality, and oversight of the sector, but have not until now been undertaken. As such, ECE remains an area for further exploration and development in future activities.

Regional Breakdowns

Regional breakdowns of relevant tables, figures, and charts have been included in the appendices of this document.

Primary Education

Equity & Access Measures

Limited data outside of broad male-female enrolment rates was available to the ESA team, while data casting light on the presence of other potentially marginalised groups (e.g. IDPs, minority clans, etc.) was not available in EMIS or other studies. Some steps were taken to evaluate the equity and access afforded some groups through primary data collection, but these efforts only had the resources to provide a broad overview of selected groups. This data has been analysed and presented, where available, below:

IDPs Enrolment in Primary Education

Table 60 – PE- IDPs Enrolment Access and Equity

	IDPs as % of ESA- Visited Schools	IDPs as % of National population
Primary	7.8%	2% - 5%

IDPs, within visited primary schools, appeared to be relatively well represented, comprising a higher percentage of school populations than national population estimates. It must be emphasised here that not all schools in the state were visited (only a sample) and that these figures can be considered representative of studied institutions. National totals may differ.

Nonetheless, the presence of IDPs in primary schools is encouraging and may indicate that efforts by educational partners are finding some success in providing additional educational access to IDPs.

Male-Female Enrolment Access and Equity

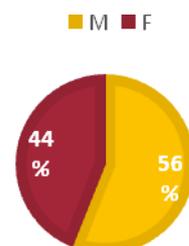
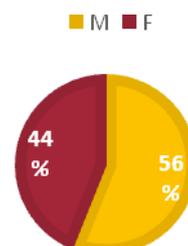
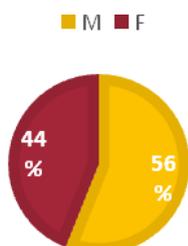
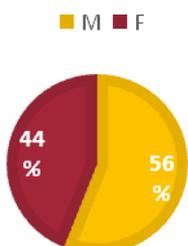
Male-female enrolment ratios from EMIS data, lesson observations, and ESA school data forms were analysed and collated below:

Figure 12 - EMIS 2013 - PE Male-Female Enrolment

Figure 13 - EMIS 2015 - PE Male-Female Enrolment

Figure 14 - 2016 Lesson Observations - PE Male-Female Enrolment

Figure 15 - 2016 School Data Form - PE Male-Female Enrolment

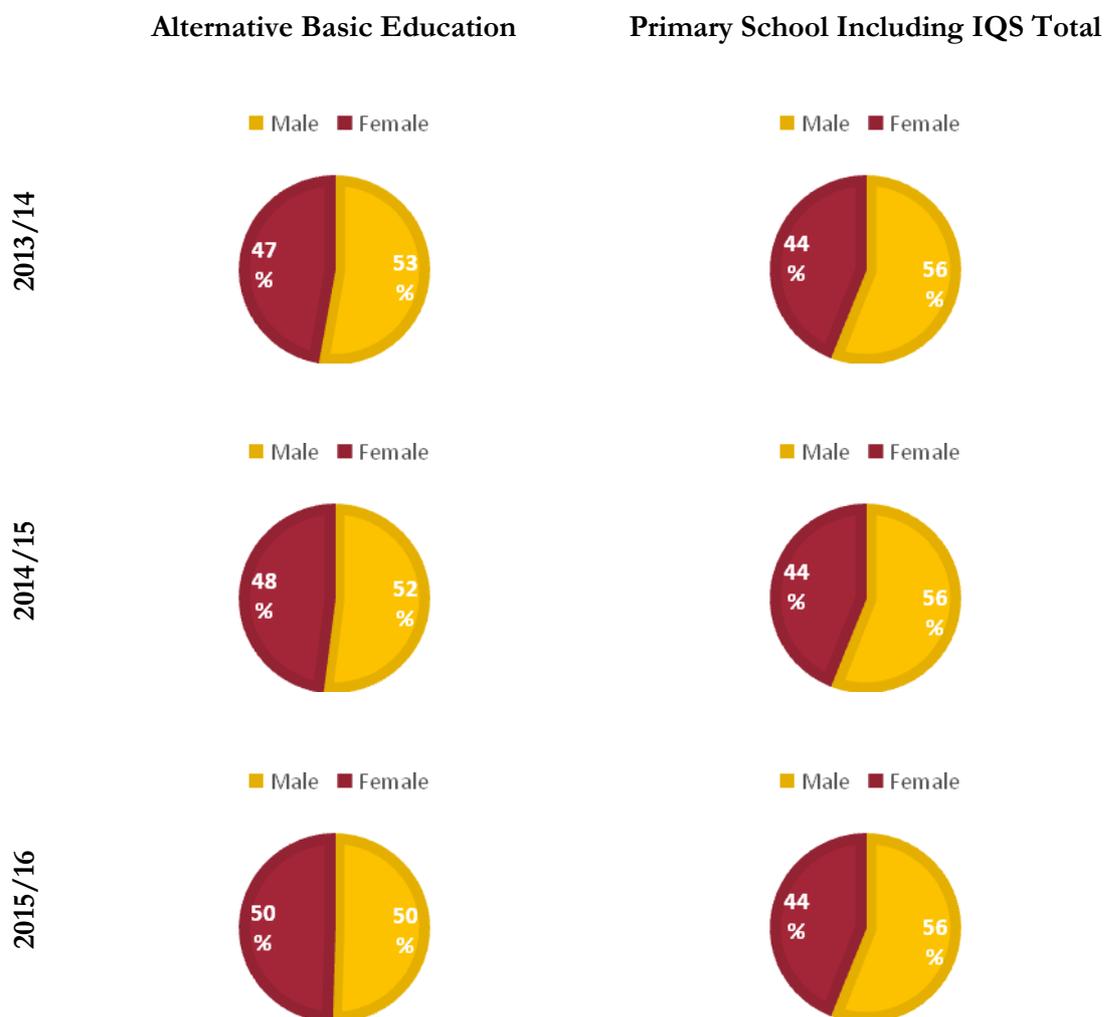


Girls were better represented within primary schools than in other areas, comprising 44% of total enrolment across all measures. The consistency across data sets would appear to indicate a relative

degree of accuracy across all instruments. Enrolment percentages across all sources were relatively consistent across Puntland's regions as well.

Additional analyses of EMIS data were undertaken for each primary subsector:

Table 61 - Analyses of EMIS Data on PE Male-Female Enrolment for Each Primary Subsector



It appears that, within ABE, women are better represented, while patterns in IQS schools are broadly consistent within the wider primary education sector.

Urban-Rural Enrolment

The urban-rural divide in educational resources was frequently mentioned as a challenge within Puntland. This was no different within the primary sector:

Table 62 - PE Urban-Rural Enrolment

	%
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	2015 EMIS ¹⁸ Primary Enrolment		UNFPA 2014 Population		Puntland Government 2016 Population	
	Urban	Rural	Urban	Rural ¹⁹	Urban	Rural
Ayn	43%	57%	-	-	-	-
Bari	83%	17%	66%	34%	55%	45%
Buudoole			-	-	33%	67%
Gardafuu	54%	46%	-	-	-	-
Hayland	42%	58%	-	-	-	-
Karkaar	62%	38%	-	-	-	-
Mudug	57%	43%	53%	47%	39%	61%
Nugaal	40%	60%	35%	65%	35%	65%
Sanag	32%	68%	29%	71%	21%	79%
Sool	45%	55%	37%	63%	24%	76%

Across nearly every region, the provision of primary enrolment skewed heavily toward urban areas, again posing potential challenges in terms of educational access and equity in rural areas.

Other Groups

The MoE&HE has taken additional steps to track other marginalised or disadvantaged groups within EMIS. However, much of this data appears to be incomplete and not yet sufficient to allow for detailed analyses. Substantial challenges were encountered throughout this study in finding additional data on other minority groups (e.g. clans and ethnic groups), given taboos surrounding the subject described by many members of the Ministry and enumeration teams. As a result, limited additional data shedding light on the equity and access afforded these groups could be found or collected. However, this lack of data indicates a potential area of focus in data collection capacity building activities in the next ESSP.

Quality of Teaching

Trained vs Untrained Teachers (2015 JRES)

Table 63 – PE- Trained vs Untrained Teachers (2015 JRES)

	Sector	Total	Trained		Untrained			
			M	F	Tot.	M	F	Tot.
Frequency	Primary	3950	933	139	1072	2488	390	2878
%		100%	27%	26%	27%	73%	74%	73%

27% of the primary teachers at EMIS registered schools are trained, indicating some

¹⁸ 2015 EMIS data were the most recent data made available to Carfax that broke down primary enrolment by both region and urban/rural areas.

¹⁹ Source: (UNFPA, 2014). The rural figures in this table include both rural and pastoralist population counts.

room for improvement in this respect. However, it may be the case that a teacher is excellent in spite of receiving no training. As such, it may be appropriate to look at other measures of teacher quality.

Within the ABE subsector, additional data was provided for the percentages of qualified and certified teachers:

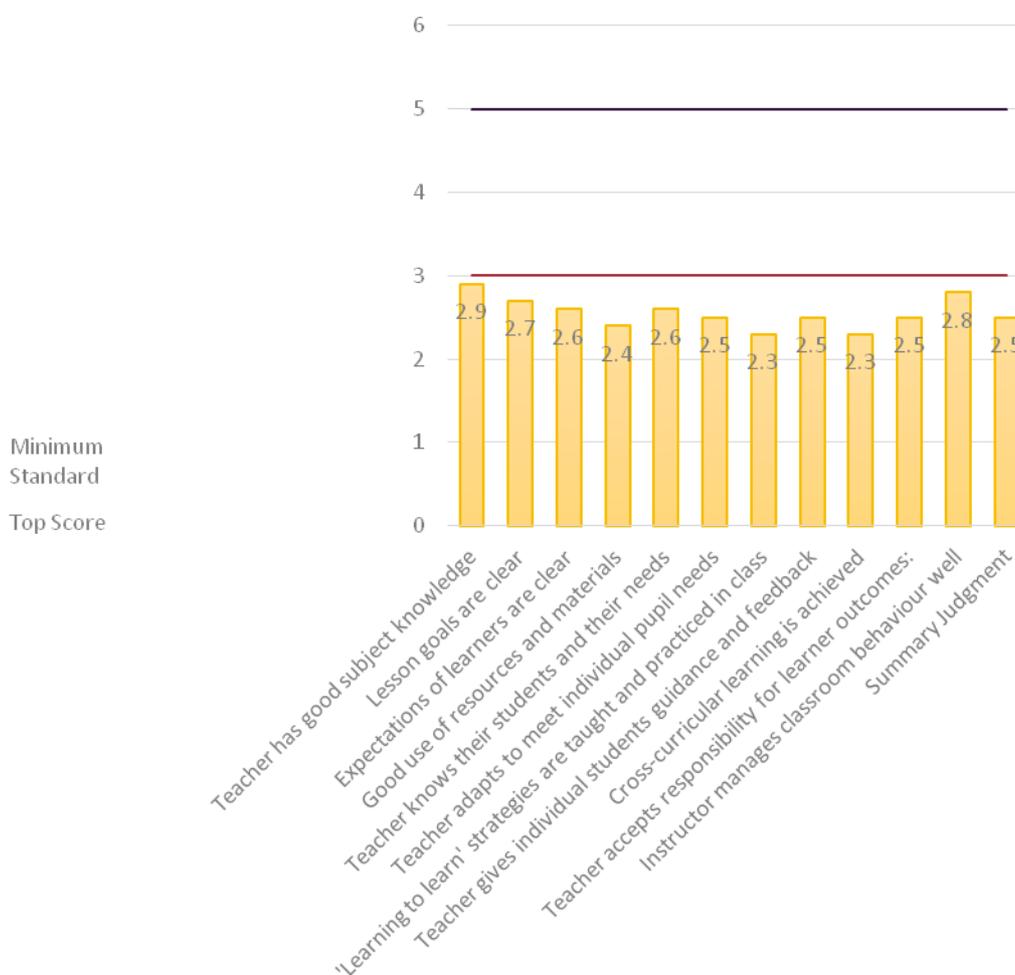
Table 64 - *Qualified and Certified ABE Teachers*

% Certified	55.9%
% Qualified	49.7%

Relatively high percentages of ABE teachers were found to be certified and/or qualified; high rates may be a result of recent GPE-funded initiatives to train a number of ABE teachers, and deploy them to rural areas (there are only 112 teachers across the sector, and the GPE-funded initiative sought to train c. 50 of them).

Observed Quality of Instruction

Figure 16 – PE - *Observed Quality of Instruction*



Standards of instruction in the primary sector appeared to be similar to those in NFE, with the average mark being 2.5. In this case, Nugal and Sool fared most poorly, while Hayland received the highest marks; it must be noted that very few schools in Hayland were visited (3 primary schools), which may have impacted the representativeness of the scores given above. On average, however, primary schools did not meet the minimum standards for pedagogical practice.

Teacher subject knowledge

Teachers were also given a Somali exam; the same examination anyone wishing to graduate from GTEC with a primary teaching certificate (with a focus on Somali instruction) must pass. The passing mark for these exams was 75%. While this examination was described as challenging by several high-level stakeholders, and that teachers of subjects other than Somali may not perform as well as a Somali-focussed teacher, poor achievement in Somali examinations may indicate challenges in communicating other lessons in teachers’ native tongue, and may have further implications for teacher quality.

Table 65 – PE- Teacher Subject Knowledge

Primary	66%	Only the teachers in Nugal performed in line with expectations, while Sanag performed particularly poorly in this measure (with an average mark of 58%). On average, however, it appears that most primary teachers in Puntland do not even meet the minimum standards for subject knowledge set by the government of Puntland.
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Primary Pupil-Teacher Ratios

Table 66 - Primary Pupil-Teacher Ratios

	Observed PTR	2013 EMIS²⁰	2016 EMIS
Primary	31:1	28:1	35:1

Pupil-teacher ratios were evaluated across the subsector, with observed pupil-teacher ratios broadly reflective of those reported

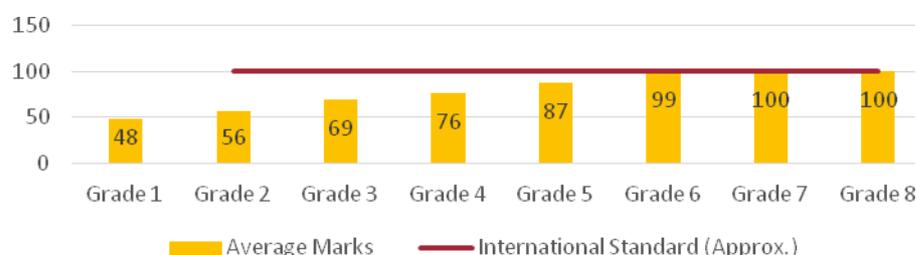
in the 2016 EMIS data. The overall PTR comprised 33:1 (below the MoE&HE standard of 40:1) in observed settings, with Gardafuu and Nugaal having the highest pupil-teacher ratios. Between 2013 and 2016, it seems the PTR has grown. This is likely an indicator of growing enrolment across schools and lagging hiring of staff to teach.

Pupil Performance on Basic Literacy Examinations

Pupils were also given basic EGRA and reading comprehension tests. The results of these tests have been included below

Letter identification

Figure 17 – PE Pupil Performance on - Letter Identification



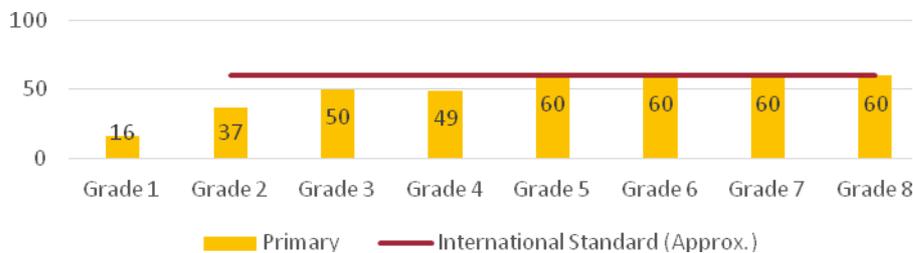
The numbers above correspond broadly to the number of Somali letters (out of 100) a child could correctly identify within 60 seconds. As expected, an upward trend is found as the grades increase. However, a number of concerns present themselves: first, that children appear to struggle up to

²⁰ Within subsector-specific analyses, all figures are based on ‘Estimate 0’ figures given within EMIS data. PTR figures are calculated by dividing total number of pupils by number of teachers.

grade 4-5 in identifying and reading out basic letters. This is broadly thought, by international standards, to be something children can easily and readily accomplish by the first stage (Grade 1) of education (University of Cambridge International Examinations, 2011).

Sounding out unfamiliar words

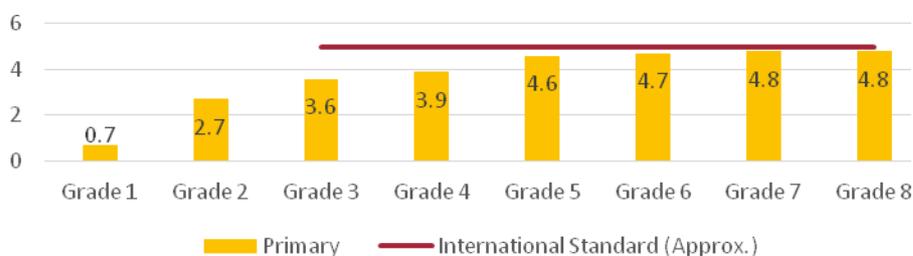
Figure 18 - PE Pupil Performance on - Sounding Out Unfamiliar Words



This exercise required children to phonetically read out invented words, testing their capacity to read basic and common letter combinations correctly. Once again, the marks demonstrated a broad upward trend as children spent more time in education. The numbers broadly correspond to the number of invented words children could correctly read out within 60 seconds. Across every region, there appeared to be major issues regarding the capacity of children to sound out basic letter combinations, even in higher-performing Nugaal, children still have some challenges until year 2/3. Such capacity is broadly expected after Stage 1 (Grade 1) of primary education by international standards (University of Cambridge International Examinations, 2011). As such, some concerns have been identified in the capacity of children to perform basic literacy tasks in Puntland’s primary subsector at the younger grades.

Reading Comprehension - Basic

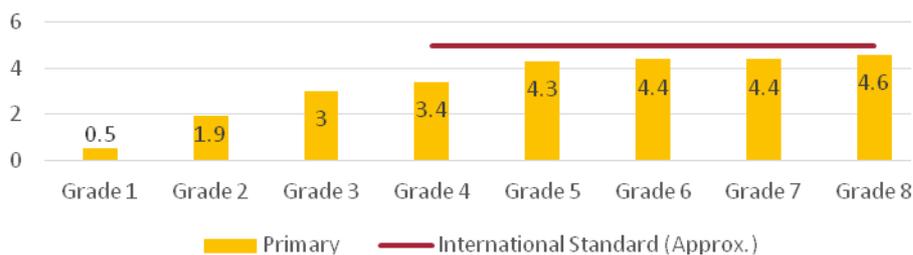
Figure 19 - PE Pupil Performance on Reading Comprehension – Basic



Children were then given simple passages to read and asked five questions seeking to test their comprehension. The passage was broadly something a child in Grade 2/3 (by international standards) could be expected to comprehend completely (University of Cambridge International Examinations, 2011). Once again, some challenges were apparent in the capacity of children to perform basic literacy tasks in primary schools.

Reading Comprehension – Intermediate

Figure 20 - PE Pupil Performance on Reading Comprehension – Intermediate



Children were then given slightly more complex passages to read, and asked five questions seeking to test their comprehension. The passages were broadly something a child in grade 3-4 (by international standards) could be expected to comprehend completely (University of Cambridge International Examinations, 2011). Once again, some challenges were apparent in the capacity of children to perform basic literacy tasks.

2014 MLA Study Results - Literacy

Table 67 - 2014 MLA Study Results - Literacy

Mark Range (out of 50)	40 – 50 marks	30 – 39 marks	20 – 29 marks	10 – 19 marks	0-9 marks
% of learners in that range*	4.1	18.3	34.8	32.0	10.7

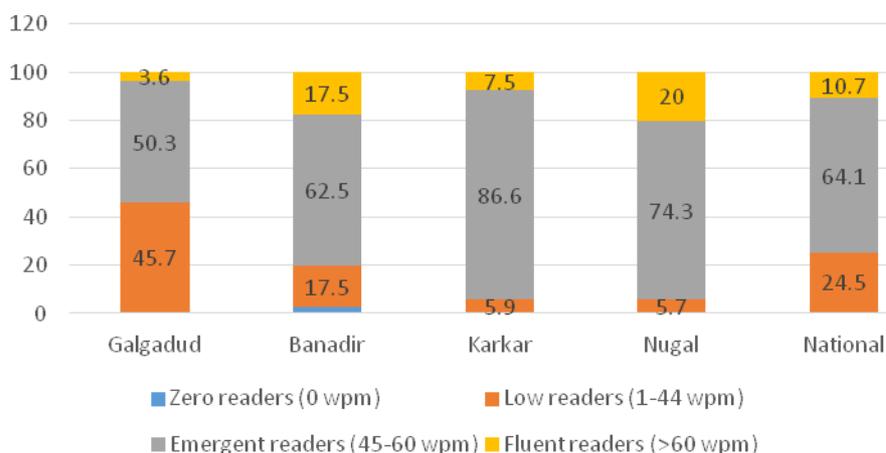
Overall MLA performance was consistent with that found in ESA literacy tests, with only 22.4% of the year 7 students tested getting at least 60% (or at least 30 out of 50) on standardised assessments; these assessments had content which the national curriculum might expect a year 7 student to have learned. 10.7% of students were found to be struggling substantially (recording only 0-9 marks), and 42.7% of students receiving less than 40% on examinations. The number of functionally illiterate pupils was thought to comprise up to c. 30%; however, the specific methodology for identifying this figure was not explained.

It is thought the MLA assessments were more challenging and in-depth than the EGRA's given pupils by the ESA team; EGRAs were set to grade 3-4, while MLA assessments were set to year 7. As such, scores on literacy assessments undertaken by the MLA will be lower. In any case, both assessments identified areas of substantial challenge with respect to literacy, demonstrating that Puntlander students are trailing at least several years behind international – and even government – standards.

NORAD EGRA Baseline

Independent consultants undertook a baseline EGRA survey across a number of Grade 3 classes, with the following results:

Figure 21 - NORAD EGRA Baseline



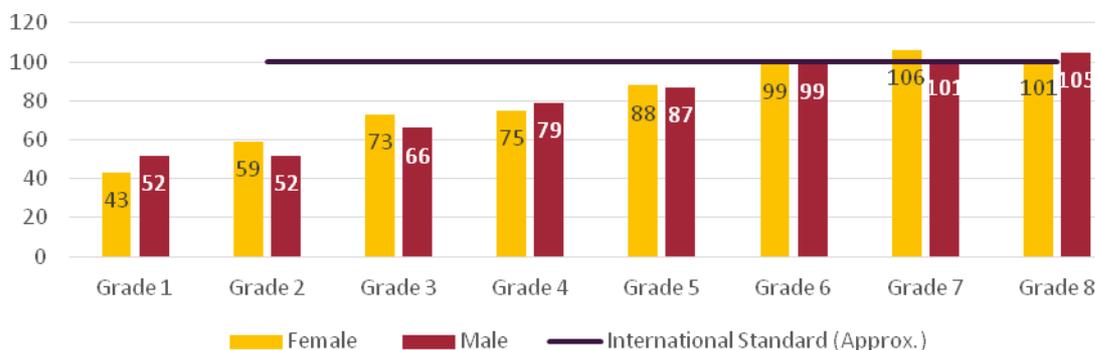
There are few pupils who could not read at all (zero readers). However, the proportion of zero readers overall was only 0.7 percent. Similarly, considering the national average, 24.5 percent of class three are low readers (they read at a fluency of between 1 and 44 wpm); a majority (64.1 percent) are emergent readers (they read at a rate between 45 and 60 wpm); while 10.7 percent are fluent readers (read at a rate of more than 60wpm). It should be noted that the ultimate objective is to move pupils from other reading bands (benchmarks) to the fluent level. This shows that a lot needs to be done to realize the overall objective of improving literacy at this grade.

This study, too, identified challenges across grade 3 pupils’ reading and literacy skills; substantial percentages of learners struggle with basic literacy tasks in grade three and are several years behind international standards. International standards indicate that children should be reading at c. 50 words per minute after 1-2 years of education (Reading A-Z, 2016).

Pupil Literacy Proficiency by Gender

Letter Identification

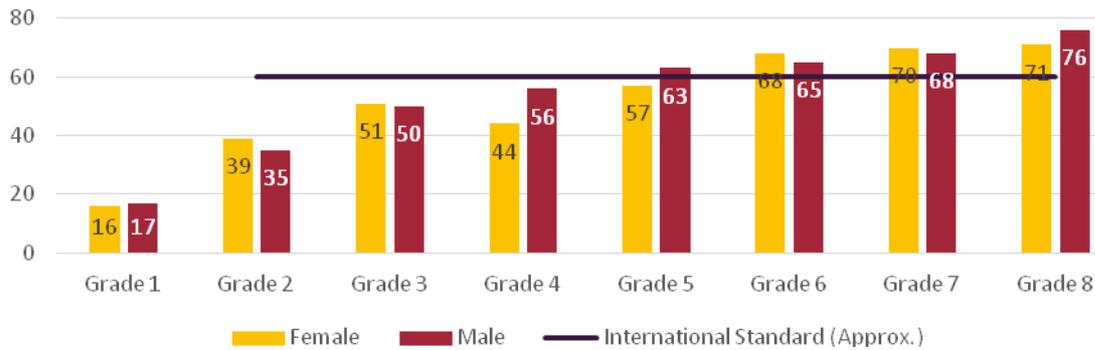
Figure 22 - PE Pupil Performance on Letter Identification by Gender



From Grade 1 to Grade 3 there appears to be a variation between female and male capacity to identify letters of the alphabet; males outperform females to some degree in Grade 1, whilst females were found to outperform males to a wider degree in Grades 2 and 3.

Invented Word

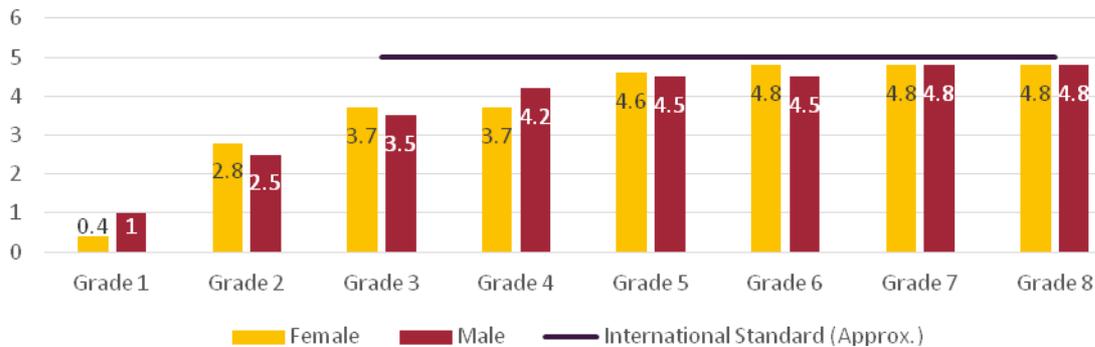
Figure 23 - PE Pupil Performance on Invented Word by Gender



Dependent on grade level, both females and males excelled at the invented word task, with males performing significantly better in Grade 4, 5 and 8, whilst females in Grade 2 excelled in comparison to their male peers.

Reading Comprehension - Basic

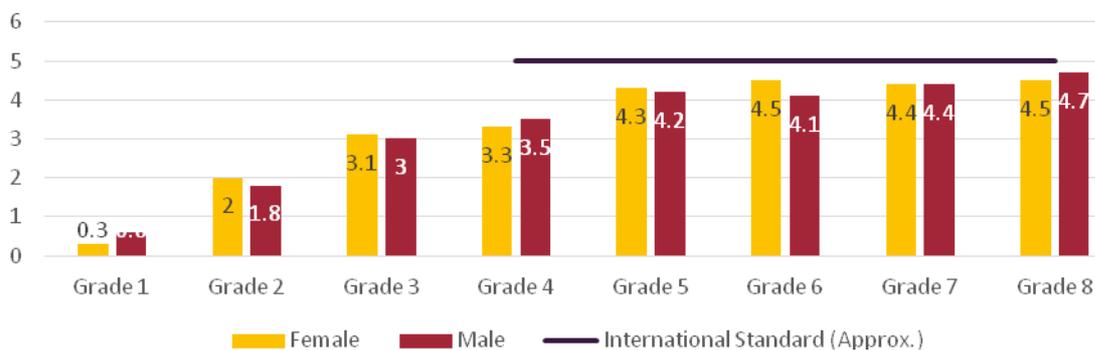
Figure 24 - PE Pupil Performance on Reading Comprehension – Basic by Gender



There did not appear to be substantial difference between male and female performance in this measure.

Reading Comprehension – Intermediate

Figure 25 - PE Pupil Performance on Reading Comprehension – Intermediate by Gender



Again, males and females appeared to perform at a relatively equal level of competency on this portion of the EGRA.

In summary, however, it appears that girls are not substantially behind their male counterparts by the time they finish primary school.

MLA Assessments by Gender– Male vs Female

Table 68 - MLA Assessments by Gender– Male vs Female

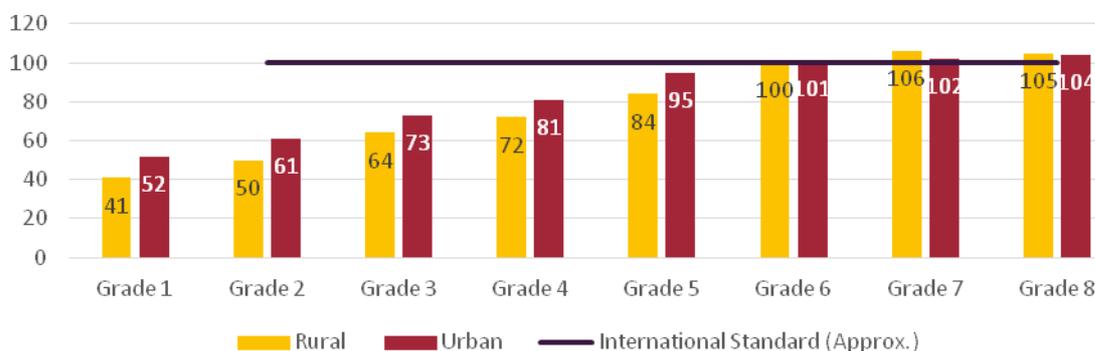
Mark Range (of 50)	40 – 50 marks	30 – 39 marks	20 – 29 marks	10 – 19 marks	0-9 marks
% of boys	4.2	18.7	32.9	32.9	11.3
% of girls	4.1	17.6	37.6	32.0	10.7

In Grade 7 literacy assessments, MLA data showed slight differences in performance between boys and girls – with 1.6% more boys than girls scoring at least 60% in examinations; however, 1.5% more boys than girls scored lower than 40% in examinations. Overall, data does not suggest a substantial gulf in performance between boys and girls across this measure, similar to findings provided by the ESA EGRA assessments.

Pupil Literacy Proficiency by Urban-Rural Split

Letter Identification

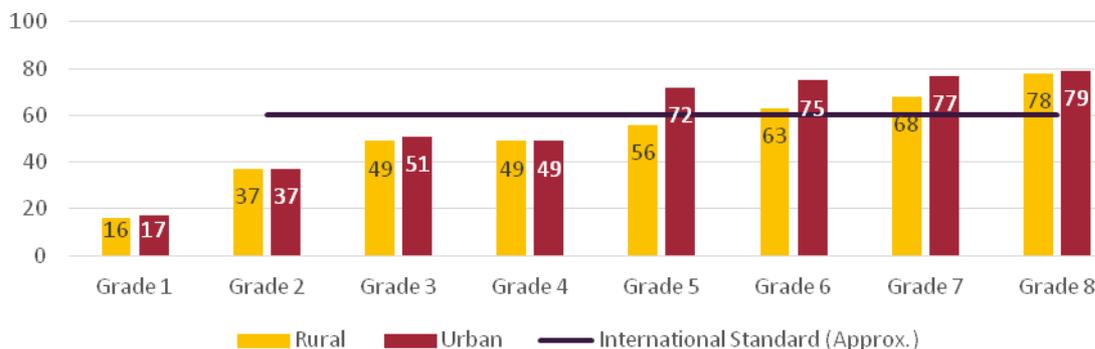
Figure 26 – PE Pupil Performance on Letter Identification by Urban-Rural Split



During the first 5 years of primary education, rural-based students face apparent challenges in their ability to identify and pronounce letters of the alphabet. Interestingly, from grade 6 onwards, the disparity becomes significantly less pronounced and rural students begin to catch up to their urban counterparts.

Invented Word

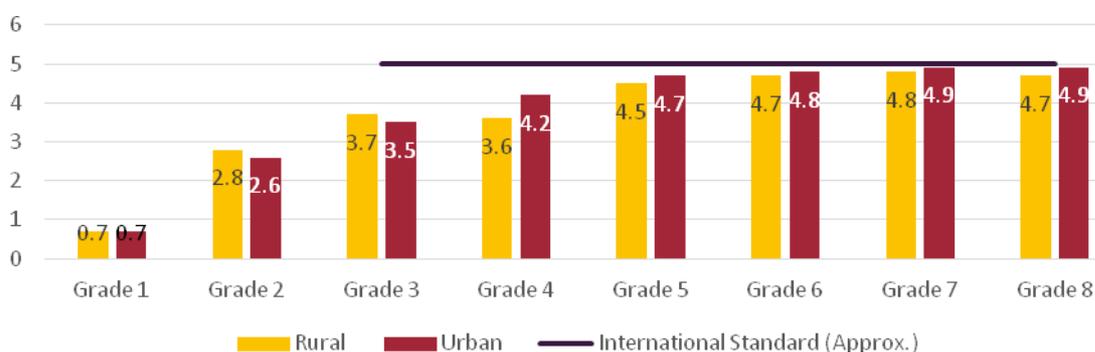
Figure 27 - PE Pupil Performance on Invented Word by Urban-Rural Split



Rural students appear to encounter more challenges than urban students when tasked with pronouncing invented words; significant disparities are identified between Grade 5 and Grade 7; it is unclear what the cause of this disparity is, but it is worth mentioning that it begins to emerge at the upper-primary level.

Reading Comprehension - Basic

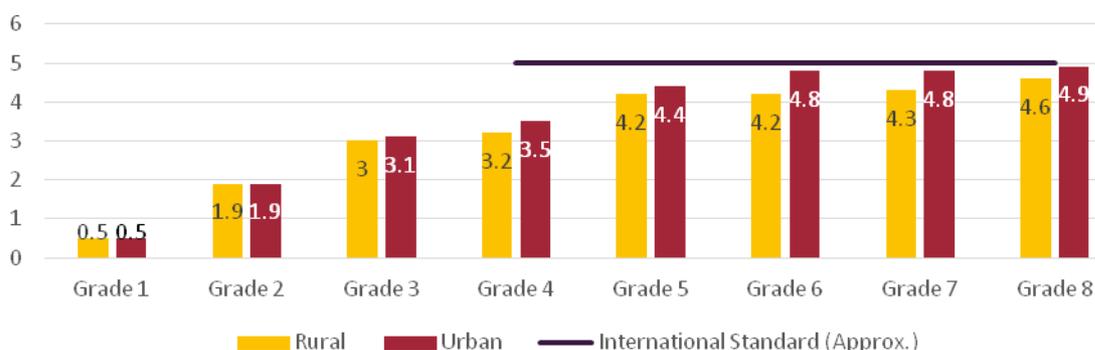
Figure 28 - PE Pupil Performance on Reading Comprehension – Basic by Urban-Rural Split



The basic reading comprehension task within the EGRA was broadly seen to be performed at a relatively similar level by students in both urban and rural schools. However, rural students in Grade 4 appeared to face a more evident challenge when compared to urban students in the same grade.

Reading Comprehension - Intermediate

Figure 29 - PE Pupil Performance on Reading Comprehension – Intermediate by Urban-Rural Split



Whilst largely keeping pace with urban students from Grade 1 to Grade 3, rural students faced apparent challenges in answering intermediate reading comprehension questions from Grade 4

onwards; once again, this finding points to potential disparities beginning to emerge at the upper primary level.

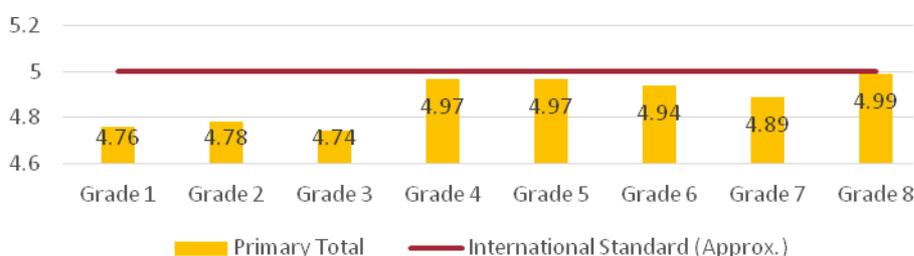
Across analyses of rural-urban literacy disparities, it appears that some challenges begin to emerge in upper-primary. This may serve as an area for further exploration and investment moving ahead.

Pupil Performance on Basic Numeracy Examinations

Pupils were also given basic numeracy and mathematics tests. The results of these tests have been included below.

Counting

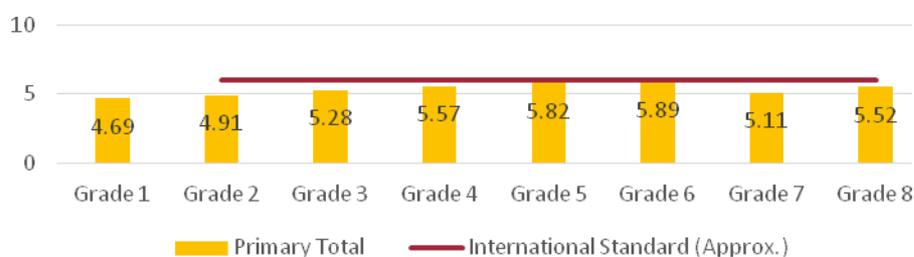
Figure 30 – PE Pupil Performance on Counting



The numbers above correspond broadly to the ability of a child to count in a linear fashion; scores are marked out of five. By and large it appears children can count competently across Puntland, though some potential challenges in Hayland (possibly exacerbated by low samples), and Karkar at some grade levels have been identified.

Read the Number

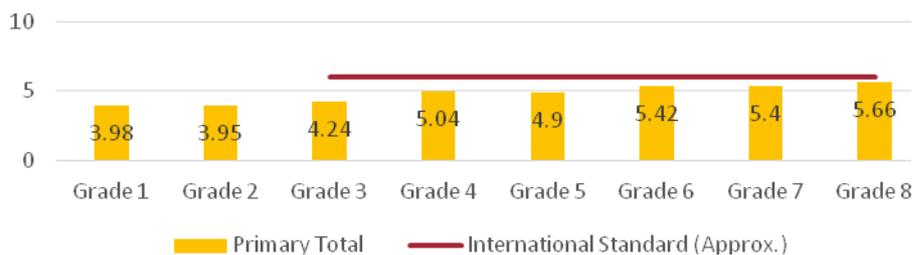
Figure 31 - PE Pupil Performance on Read the Number



This exercise presented a series of two-digit numbers and required the children to identify and read out the number; scores are given out of six. This segment of the assessment included six different numbers that the child was tasked with reading out loud. As expected, the ability of students to recognize numbers up to 100 grew as the grade level increased, though there did exist a drop off in scores recorded at Grades 7 and 8; this is thought to have emerged from challenges in sample representativeness, rather than in state-wide levels of achievement. The capacity to read and write numerals up to 120 is broadly expected by international standards to be present by the end of Somali Grade 2 (Grade 1 in the Common Core) (Common Core State Standards Initiative). As such, there exists some concern related to the capacity of primary school children to perform basic numeracy tasks; within Hayland and Sanag this concern appeared to be particularly pronounced.

Comparing Numbers

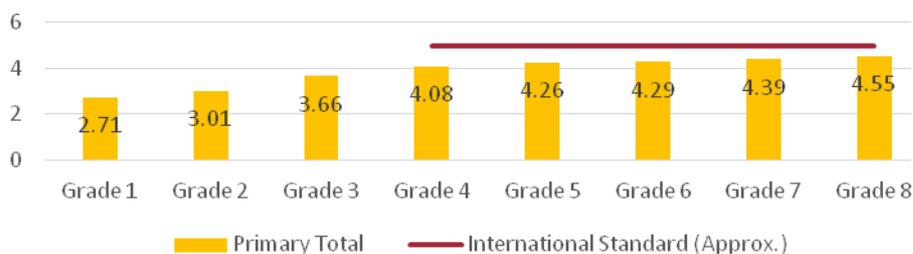
Figure 32 -- PE Pupil Performance on Comparing Numbers



This exercise assessed students' ability to compare separate two-digit numbers to determine which of the two was greater; scores are given out of six. The capacity to perform this is broadly expected to be achieved by the time a student completes Grade 2 (Common Core State Standards Initiative). Students in Karkar and Hayland particularly were found to have some challenges in their ability to undertake this basic numeracy task up until Grade 3/4. Looking at the subsector more broadly, the ability of primary school children to perform basic numeracy tasks was once again identified as a challenge.

Addition

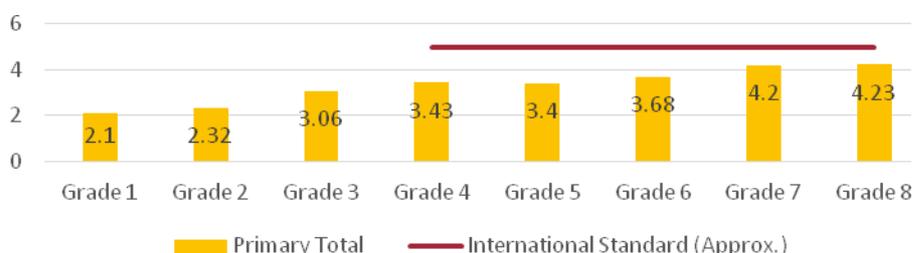
Figure 33 – PE Pupil Performance on Addition



Children were given a set of five separate addition problems, consisting of both single-digit and double-digit figures; scores are given out of five. As expected, the results demonstrated a consistent upward trend across grade levels. The ability to add numbers within 100 is broadly expected to be a learning outcome of students by the end of Grade 3 (Common Core State Standards Initiative). Given that the assessments were undertaken shortly before the end of the school year, the apparent difficulties faced by students in grade 3-5 in Bari, Karkar, and Sanag, and ongoing challenges in Hayland, would indicate that some students are facing challenges in terms of keeping pace with international learning outcome standards.

Subtraction

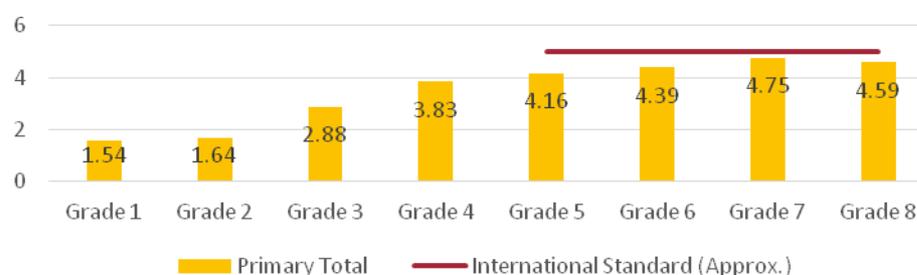
Figure 34 – PE Pupil Performance on Subtraction



Children were then given a set of five separate subtraction problems, comprising double-digit figures; scores are given out of five. The ability to subtract numbers within 100 is broadly expected to be a learning outcome of students by the end of grade 3 (Common Core State Standards Initiative). Across every region, there exists concern related to the ability of children to complete basic subtraction problems. As indicated in the table above, it is not until grade 7 that students are correctly answering at least 80 percent of the subtraction problems presented to them.

Multiplication

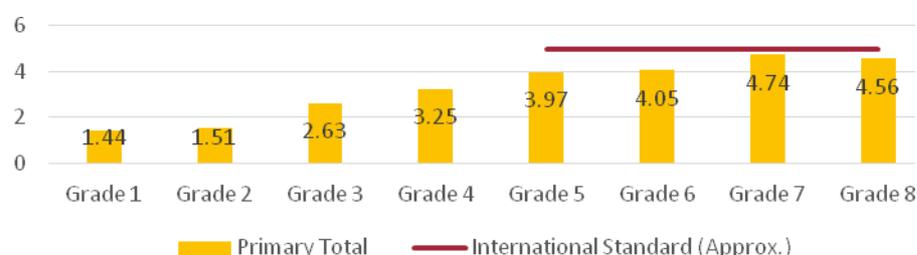
Figure 35 – PE Pupil Performance on Multiplication



Children were further given a set of five separate multiplication problems, solely comprised of single digit-figures. The ability to multiply numbers within 100 is broadly expected to be a learning outcome of students by the end of grade 4 (Common Core State Standards Initiative). As evidenced by the assessment results, it appears that primary aged students across all regions in Puntland are approximately 1-2 years behind their international counterparts, with Karkar and Sanag facing particular challenges.

Division

Figure 36 – PE Pupil Performance on Division



Children were further given a set of five separate division problems, comprised of both single digit-and double-digit figures; scores are given out of five. The ability to divide numbers within 100 is broadly expected to be a learning outcome of students by the end of grade 4 (Common Core State Standards Initiative). The only regions to display perfect scores on the division section of the numeracy assessment were Bari, Hayland, and Karkar. Overall though, there are clearly identifiable challenges in terms of the capacity of primary aged students to carry out basic numeracy tasks. It was not until grade 6 that average scores reached at least 80 percent; indicating a three-year development lag in learning achievements for this particular numerical proficiency.

2014 MLA Mathematics Assessments

AET undertook basic mathematics assessments of Grade 7 pupils; the subject materials were consistent with grade 7 learning outcomes on Puntland government curricula. It should be noted

that the MLA examination material was set to be more challenging than ESA materials, as such MLA data indicates lower average scores.

Table 69 - 2014 MLA Mathematics Assessments

Mark Range (of 25)	20-25	15-19	10-14	5-9	0-4
% of learners in that range	0	0.2	8.0	43.1	48.7

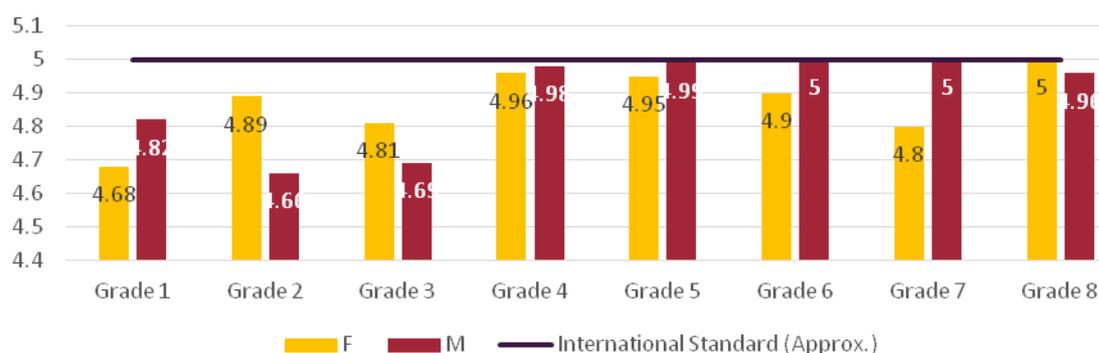
Basic numeracy and mathematics appeared to be an area of challenge for students in Puntland, with 99.8% of all students scoring lower than 60%, and 91.8% of all students scoring less than 40% on examinations.

Numeracy Results by Gender

Table 70 - Numeracy Results by Gender

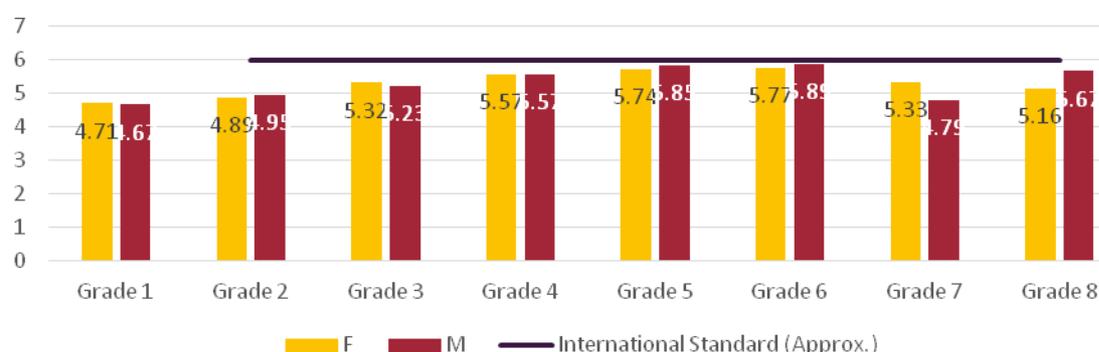
Counting

Figure 37 – PE Pupil Performance on Counting by Gender



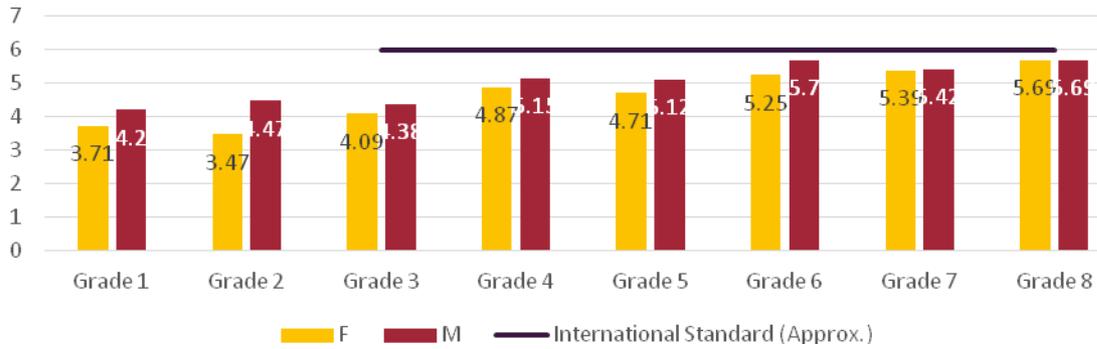
Read the Number

Figure 38 – PE Pupil Performance on Read the Number by Gender



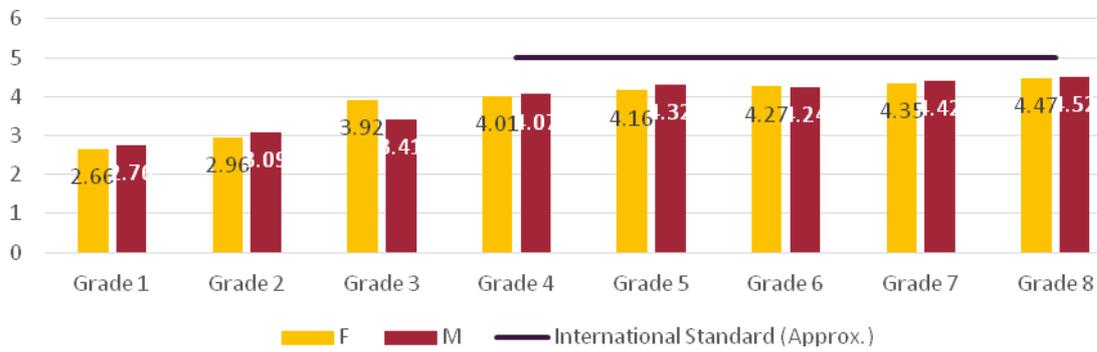
Which is Greater

Figure 39 - PE Pupil Performance on Which is Greater by Gender



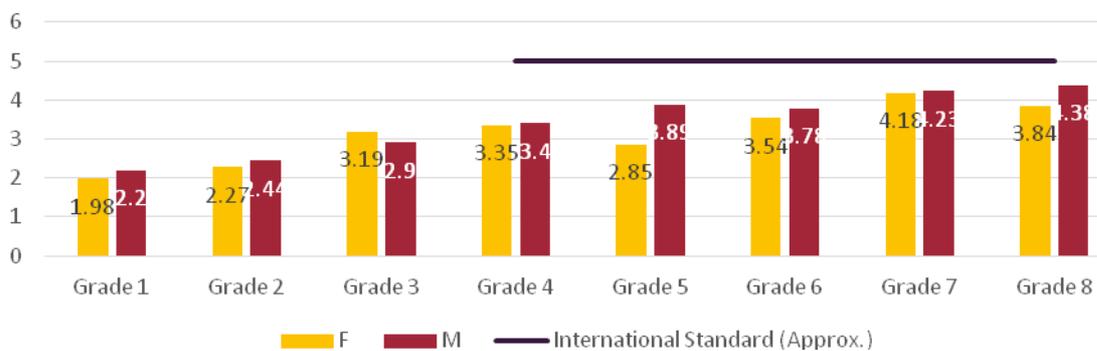
Addition

Figure 40 - PE Pupil Performance on Addition by Gender



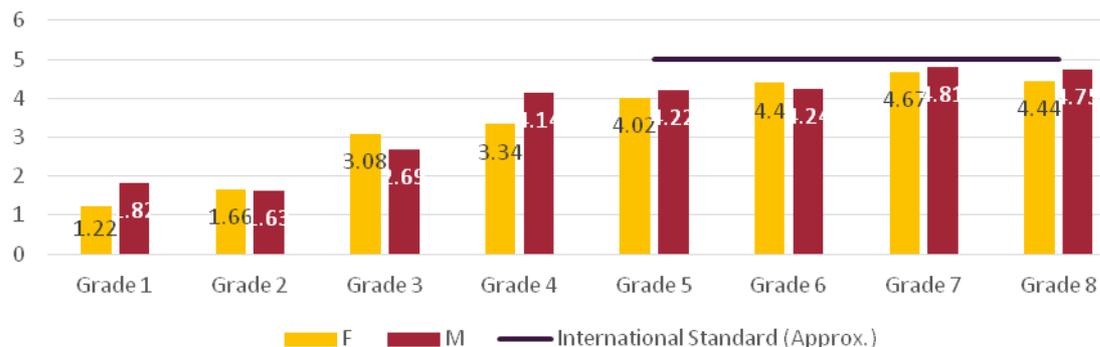
Subtraction

Figure 41 - PE Pupil Performance on Subtraction by Gender



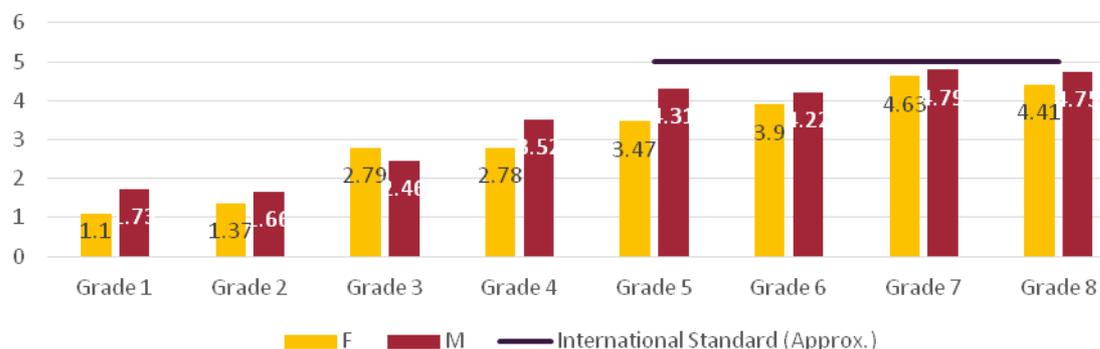
Multiplication

Figure 42 - PE Pupil Performance on Multiplication by Gender



Division

Figure 43 - PE Pupil Performance on Division by Gender



It appears that across the more challenging assessment, boys broadly outperformed girls. This finding was supported by the MLA Grade 7 report:

Table 71 - MLA Grade 7 report

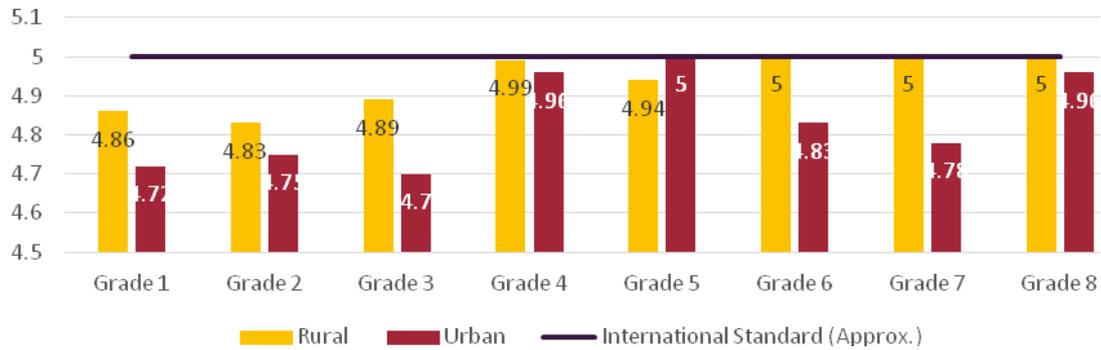
Mark Range	20-25	15-19	10-14	5-9	0-4
% of boys out of 318	0	0.3	9.4	43.4	46.9
% of girls out of 230	0	0	6.1	42.6	51.3

On average, boys score higher than girls in these measures.

Numeracy Results by Urban - Rural Divide

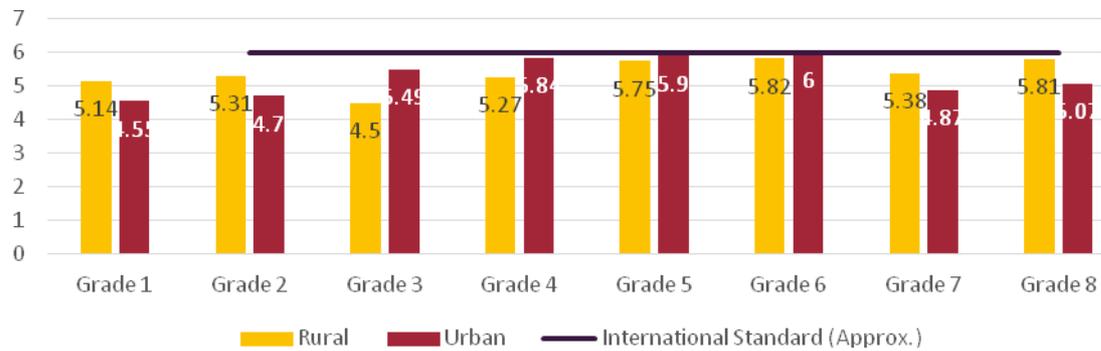
Counting

Figure 44 - PE Pupil Performance on Counting by Urban - Rural Divide



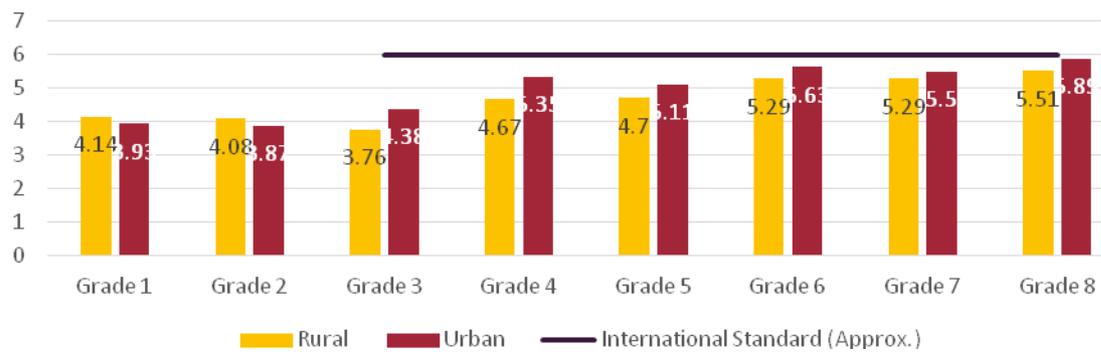
Read the Number

Figure 45 - PE Pupil Performance on Read the Number by Urban - Rural Divide



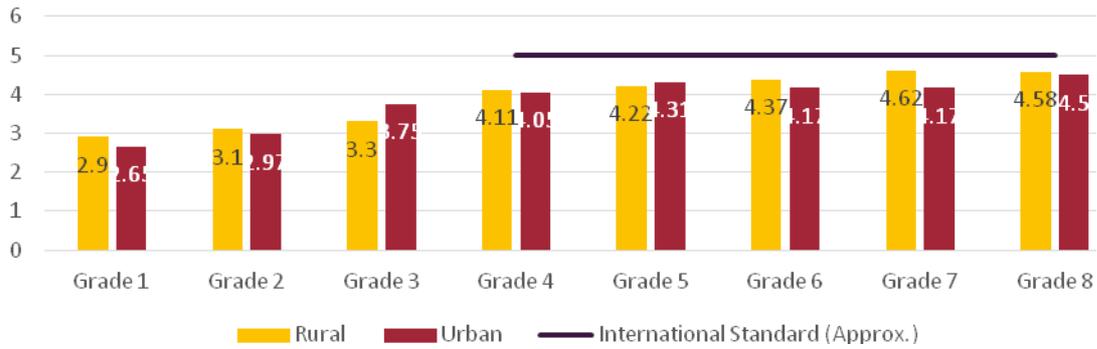
Which is Greater

Figure 46 - PE Pupil Performance on Which is Greater by Urban - Rural Divide



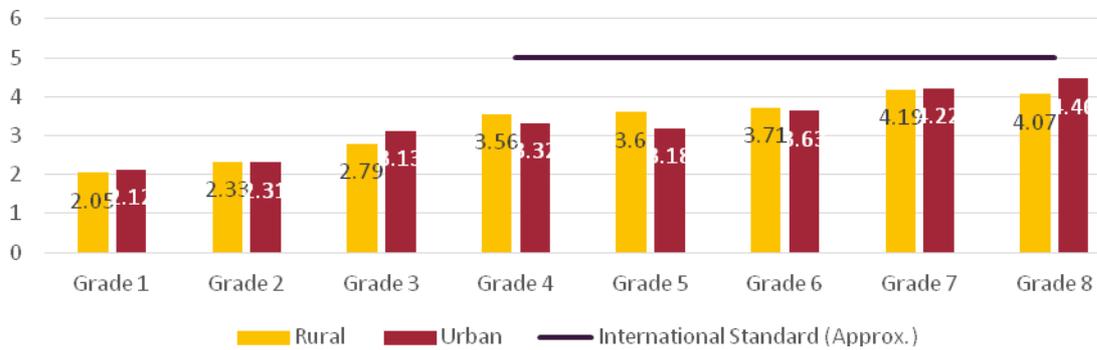
Addition

Figure 47 - PE Pupil Performance on Addition by Urban - Rural Divide



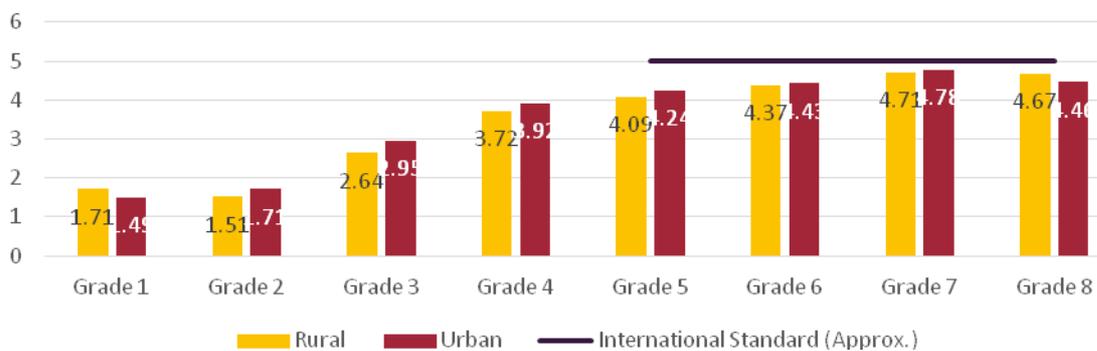
Subtraction

Figure 48 - PE Pupil Performance on Subtraction by Urban - Rural Divide



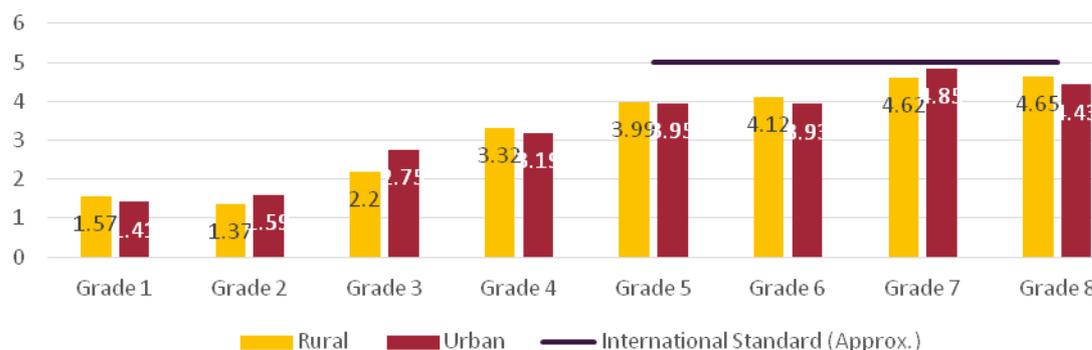
Multiplication

Figure 49 - PE Pupil Performance on Multiplication by Urban - Rural Divide



Division

Figure 50 - PE Pupil Performance on Division by Urban - Rural Divide



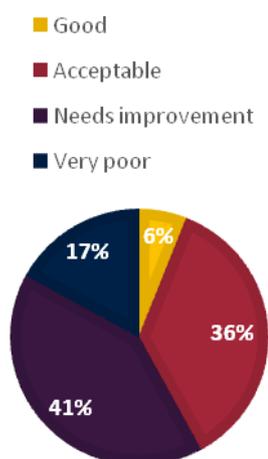
In more challenging assessments, it seems that urban students attain higher scores than their rural counterparts. This result may point to unequal standards of provision in different regions, or variances in socio-economic status and related learning outcomes.

Across the previous analyses, of both ESA and MLA data, it appears that primary school students face some challenges in performing basic numeracy tasks. Hayland, Sanag, and Karkar generally seemed to face the biggest challenges in performance, as did girls and rural pupils across more challenging measures of achievement. In any case, it seems that Puntlander pupils are lagging several years behind their international counterparts.

Facilities

The enumerators also collected data on the standard of facilities in primary schools, with the following results:

Figure 51 – Primary School Facilities’ Condition



The primary sector did not fare well, with an average mark of 2.6 in standard of facilities. Ayn, Sool, and Nugal fared most poorly here, with summary scores of 1.5, 1.9, and 1.8 respectively. Enumerators were asked to comment on what was lacking in the classrooms and what needed improvement. Analysis of these will be evaluated in later sections.

Summary Score:	2.6
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Complementary Waxbarashadu Waa Iftiin (WWI) Findings on Standards of Facility

The Waxbarashadu Waa Iftiin (WWI) project Needs Assessment additionally undertook facility evaluation research.

Table 72 – WWI Primary School Facilities Evaluation

% of Temporary Structure Schools	18%
% of Classrooms Uncomfortably Hot	18%
Pupil-Desk Ratio	4:1 (3:1 Government Standard)
% of Schools with Safe Water	53%
Pupil-Latrine Ratio	1:124 (1: 111 for boys and 1: 93 for girls)
School with Hand Washing Facilities	29%

Taken together, these indicators appear to show ongoing challenges in standards of facilities in primary schools.

Presence of Learning Materials

The enumeration team then sought to establish the prevalence of books and learning materials in each classroom they visited, with the following results:

Observed presence

Table 73 - Presence of Learning Materials in Primary Schools

	%	
	ESA Observed Presence	Teachers indicating Presence
Primary	53%	32%
Ayn	13%	0%
Bari	76%	0%
Hayland	67%	0%
Karkaar	75%	15%
Mudug	25%	38%
Nugaal	81%	78%
Sanag	60%	42%

Sool	16%	0%	51.6% of Primary classrooms were observed not to have any textbooks during ESA visits, again posing concerns about the availability of textbooks in schools. 68% of teachers interviewed indicated they had no books within their classrooms. Some regions, namely Sool, Mudug, and Ayn, appear to have particular challenges with regard to resource availability. These findings once again raise concerns about the capacity of the education sector to deliver materials and resources, and oversee educational delivery, across the state.
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WWI Needs Analysis Pupil Textbook Ratios

Pupil textbook ratios were reported in the Waxbarashadu Waa Iftiin (WWI) Needs Analysis as 2:1; however, these figures were self-reported, and not subject to in-classroom validation. It is unclear, therefore, from where the discrepancy arises.

EMIS Data

EMIS data from 2013 and 2015 note issues relating to the availability of textbooks. In 2013, the average Pupil-Textbook Ratio indicated that an average of 2 students shared textbooks in key subjects (Arabic, Maths, and Somali); however, in 2015 that number increased to 7 pupils per textbook. Total available textbooks decreased as well, indicating that stocks of textbooks were being depleted and not replenished throughout the period.

It should be noted that figures rely on self-reported totals, and should therefore be approached with a degree of caution. However, when taken together, all indicators of learning resource availability reveal ongoing challenges in the availability of learning resources.

Examinations

The 2015 examination report indicated that 90% of primary school leavers passed certifications. However, government examiners, in the 2014 MLA Report, indicated that approximately 30% of Year 7 students may be functionally illiterate, with ESA and NORAD EGRAs showing similar findings; in MLA Mathematics assessments, c.90% of students only managed to score 40% on basic numeracy examinations set to the government's own age-appropriate standards. As we have seen, some pupils faced challenges in basic literacy and numeracy tasks. This raises questions as to the appropriateness and challenge of government certifications and examinations, and their validity as measurements of learning outcomes. Furthermore, it may be useful to benchmark performance on certification examinations against international standards in the future, to allow of more effective benchmarking and objective evaluation of pupil performance.

Efficiency

Internal Efficiency

Internal efficiency deals with measuring retention, dropout, and repetition across a specific educational subsector. In some cases, it also deals with throughput – i.e. the percentage of students finishing one level of education and beginning another.

Table 74 - Primary Grade-to-Grade Survival Rates

	%								
	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-8+	1-8+
Boys	75%	94%	83%	83%	82%	90%	85%	98%	29.9%
Girls	76%	89%	77%	83%	78%	89%	74%	85%	18.9%
Total	75%	92%	81%	83%	80%	90%	81%	83%	22.5%

Survival rates from grade-to-grade were broadly consistent, with 75%-90% reported between years; girls appeared (across most primary years) to

experience lower survival rates than boys. Survival rates from grade 1-8 were 22.5%; boys' rates of survival comprised 29.9% and girls' comprised 18.9%, indicating challenges in female education.

The reported rate of grade repetition across each Primary subsector was relatively low between 2013 and 2015. An overview of EMIS figures can be found below:

Table 75 – EMIS Primary Repetition Rates

		%	
	Level	2012/13	2015/16
Primary Schools including IQS ²¹	Class 1	3.98%	1.3%
	Class 2	3.14%	0.9%
	Class 3	2.97%	1.1%
	Class 4	2.66%	0.9%
	Class 5	2.47%	0.8%
	Class 6	2.45%	0.8%
	Class 7	2.35%	0.8%
Class 8	3.98%	1.0%	
Primary Total		3.10%	1.0%

It seems that, year-on-year, the rate of repetition has been declining; however, in light of earlier findings relating to high rates of illiteracy and innumeracy among Year 7 primary students, and very high rates of primary graduation in spite of these challenges, it is unclear what standards are being used to make a child eligible for graduation or grade repetition, nor how consistently these are being applied. Furthermore, these figures rely heavily on self-reported data and must therefore be viewed with a degree of caution.

Table 76 - Primary Rates of Graduation to Secondary Study

Total Grade 8 Enrolment (2014)	7,098
Grade 8 Students Registered for Exam (2014)	6,711
Grade 8 Students Passed Exam (2014)	6,422
Rate of Graduation (2014)	90%
Total Form 1 Enrolment (2015)	6,909
Rate of Graduation to Secondary Study	108%

The National Examinations Report indicated that 6,711 (6,422 passed) students sat for Primary Leavers Examinations in 2014. The rate of graduation for all grade 8 students therefore sat at 90%. More students enrol in Form 1 than graduate from grade 8, indicating that some students

may be waiting several years before returning to secondary study. Given the relatively high dropout rates described above (c. 10%-25% per annum), it may be the case that students graduating primary school are the more-wealthy ones, and are far more likely to make it to secondary education.

²¹ This does not include ABE data which was not included in the most recent EMIS year book.

Non-formal Education

Equity & Access Measures

Limited data outside of broad male-female enrolment rates was available to the ESA team, while data casting light on the presence of other potentially marginalised groups (e.g. IDPs, minority clans, etc.) was not available in EMIS or other studies. Some steps were taken to evaluate the equity and access afforded some groups through primary data collection, but these efforts only had the resources to provide a broad overview of selected groups. This data has been analysed and presented, where available, below:

IDPs Enrolment

Table 77 –NFE IDPs Enrolment

	IDP as % of visited schools	IDPs as % of National population
NFE	4.96%	2% - 5%

IDPs comprised a relatively high percentage of all students at visited NFE institutions, though still short of the total 6% they are thought to make of Puntland’s total population.

Male-Female Enrolment

Male-female enrolment ratios from EMIS data, lesson observations, and ESA school data forms were analysed and collated below:

Figure 52 - 2013/14 NFE Male-Female Enrolment

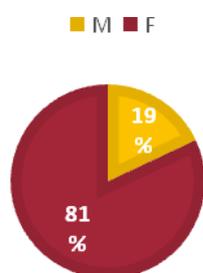


Figure 53 – 2015/16 EMIS - NFE Male-Female Enrolment

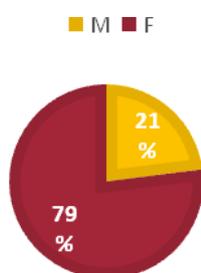


Figure 54 –Lesson Observations - NFE Male-Female Enrolment

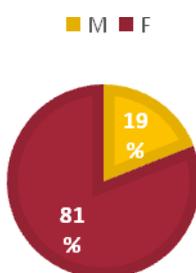
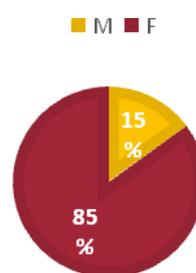


Figure 55 - School Data Form - NFE Male-Female Enrolment



In NFE, it appears more women than men attend classes; a finding consistent with previous reports. Some documentation has been submitted to the ESA team, pointing to planned research casting additional light on the lower rates of male participation in NFE, but it appears this has not yet been undertaken; However, EMIS from 2014 and 2015 would appear to indicate this is improving.

Urban-Rural Enrolment

The urban-rural divide in educational resources was frequently mentioned as a challenge within Puntland.

Table 78 – Urban-Rural Enrolment

	%					
	2015 EMIS ²² NFE Enrolment		UNFPA 2014 Population		Puntland Government 2016 Population	
	Urban	Rural	Urban	Rural ²³	Urban	Rural
Ayn	72%	28%	-	-	-	-
Bari	27%	73%	66%	34%	55%	45%
Buudoole	-	-	-	-	33%	67%
Gardafuu	-	-	-	-	-	-
Hayland	0%	100%	-	-	-	-
Karkaar	41%	59%	-	-	-	-
Mudug	50%	50%	53%	47%	39%	61%
Nugaal	43%	57%	35%	65%	35%	65%
Sanag	0%	100%	29%	71%	21%	79%
Sool	8%	92%	37%	63%	24%	76%

Within NFE, provision appeared to be broadly skewed toward rural enrolment; this is not surprising, given NFE's focus on providing education to those that have not had the opportunity to access primary education. However, this figure must be born in mind alongside total rural-urban enrolment statistics; rural enrolment across all subsectors remains disproportionately low compared to urban provision.

Other Groups

Substantial challenges were encountered throughout this study in either finding data on other minority groups (e.g. clans and ethnic groups), given taboos surrounding the subject described by many members of the Ministry and enumeration teams. As a result, limited additional data could be found or collected shedding light on the equity and access afforded these groups. However, this lack of data indicates a potential area of focus in data collection capacity building activities in the next ESSP.

Quality of Instruction

Percentages of Trained vs Untrained Teachers

Figures on the percentage of trained vs untrained in NFE were provided in the 2015 EMIS Yearbook:

Table 79 - Qualified and Certified NFE Teachers

% of Qualified NFE Teachers	48.2%
% of Certified NFE Teachers	38.8%

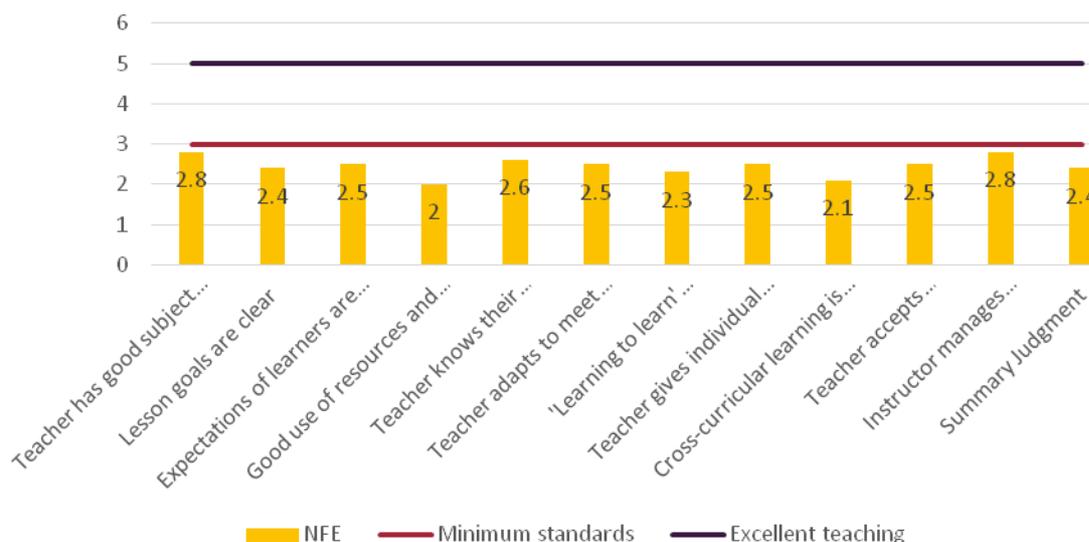
Relatively high percentages of teachers in the NFE sector were reported to have training or qualifications required by the government.

²² 2015 EMIS data were the most recent data Carfax had access to that broke enrolment down by region and urban/rural location.

²³ Source: (UNFPA, 2014). The rural figures in this table include both rural and pastoralist population counts.

Observed instructional quality

Figure 56 -- NFE - Observed Instructional Quality



Within the NFE sector, some challenges are apparent, with an average mark of 2.4 across the sector. Within evaluated regions, Ayn performed most poorly (with a summary score of 2), while Karkaar appeared to have the strongest standards of provision within the NFE sector (with a summary score of 3.1).

Availability of Learning Materials

Enumerators marked whenever they entered a classroom and there were no books or learning materials for students:

Table 80 – NFE- Availability of Learning Materials

	No books observed	Teachers reporting no books
NFE	43%	96%

In all, enumerators reported that pupils had no books in 43% of NFE classrooms. This percentage is concerning, and somewhat at odds with official reports in previous EMIS data. Teachers within the NFE sector were also asked whether there were any textbooks in their classrooms. 96% of respondents indicated there were not; while this percentage is somewhat distinct from

that observed, the response may be something of a concern on its own. These findings once again pose questions about the capacity of the sector to distribute resources and oversee educational delivery across the state.

EMIS Totals

Within the NFE sector, EMIS reported that an average of 16 NFE pupils were sharing textbooks across the key subjects of Mathematics and Somali. This supports earlier measures of resource availability.

Teacher subject knowledge

Teachers were also given a basic Somali exam; the same examination anyone wishing to graduate from GTEC with a primary teaching certificate must pass. The passing mark for these exams was 75%. A Somali language examination, set at minimum knowledge standards of Primary teachers, was thought an appropriate measure across all teachers in all subjects; Somali, even in cases where

English is meant to be the primary language of instruction, is often the primary language of instruction; if a teacher is unable to effectively communicate and write in Somali, a basic prerequisite for communicating subject knowledge in any subject, their teaching effectiveness in any subject will likely be impacted.

Table 81 – NFE- Teacher exams

NFE	69%	NFE teachers performed poorly overall, with only Nugaal (again) receiving an average pass mark (of 79%). On average, however, it appears that most NFE teachers in Puntland do not meet the minimum standards for subject knowledge and literacy set by the government of Puntland to be a teacher.
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Waxbarashadu Waa Iftiin (WWI) Needs Assessment – Teacher Qualification Levels

Table 82 - Waxbarashadu Waa Iftiin (WWI) Needs Assessment – NFE Teacher Qualification Levels

Highest Education Level	% Total	Across this measure, most teachers held only primary and secondary qualifications; 45% however had some post-secondary study.
Primary	5%	
Secondary	50%	
University	10%	
Diploma	27%	
College Certificate	8%	
Total	100%	

Pupil-Teacher Ratios

Table 83 – NFE- Pupil-Teacher Ratios

	EMIS 2016	Observed PTR	WWI Totals	Government Standards
NFE	35:1	28:1	27:1	40:1
Ayn²⁴	18:1	32:1	-	-
Bari	29:1	32:1	-	-
Gardafuu	18:1	-	-	-
Hayland	39:1	-	-	-
Karkaar	35:1	25:1	-	-
Mudug	40:1	23:1	-	-
Nugaal	38:1	43:1	-	-
Sool	40:1	22:1	-	-

NFE provision has a similar pupil-teacher ratio to primary provision within EMIS measures; it may be the case that a relatively small NFE ESA school sample resulted in differences with EMIS totals. Some regional disparities were also found here, with Mudug, Sool and Hayland having the highest NFE PTR, and Ayn having the lowest.

The findings offered across both ESA and Waxbarashadu Waa Iftiin (WWI) Needs Assessment research appear to correspond broadly, providing encouraging validation

²⁴ Regional PTRs are from 2015, as limited data was available from 2016; they have been provided for illustrative purposes.

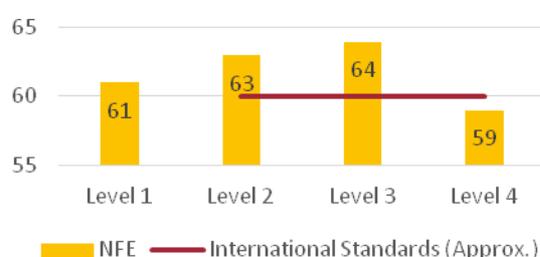
across both measures. Some discrepancies may be explained by lower numbers of schools being analysed by the Waxbarashadu Waa Iftiin (WWI) needs assessment.

Pupil Performance on Basic Literacy Examinations

Pupils were also given basic EGRA and reading comprehension tests. The results of these tests have been included below.

Letter Identification

Figure 57 – NFE Pupil Performance on Letter Identification



The numbers above correspond broadly to the number of Somali letters (out of 60) a student could correctly identify within 60 seconds. As expected, an upward trend is found as the grades increase. This is broadly thought, by international standards, to be something students can easily and readily accomplish

during the first year of primary education (University of Cambridge International Examinations, 2011). It appears that most pupils can achieve these minimum standards confidently.

Invented Word

Table 84 - NFE Pupil Performance on Invented Word

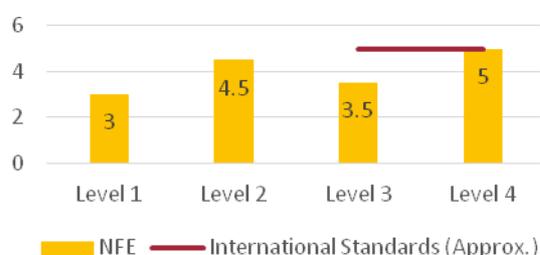


This exercise required students to phonetically read out invented words, testing their capacity to read basic and common letter combinations correctly. Once again, the marks demonstrated a broad upward trend as students spent more time in education. The numbers broadly correspond to the number of invented words a

student could correctly read out within 60 seconds. Across every region, there appeared to be major issues regarding the capacity of NFE pupils to read out basic letter combinations; even in higher-performing Nugaal, students still experience some challenges until year 4. Such capacity is broadly expected after the first two years of primary education by international standards (University of Cambridge International Examinations, 2011). As such, some concerns have been identified in the capacity of NFE students to undertake basic literacy tasks. While it may be the case that NFE students are broadly those from more disadvantaged backgrounds, questions about graduation rates can be raised by these concerns.

Reading Comprehension – Basic

Figure 58 - NFE Pupil Performance on Reading Comprehension – Basic

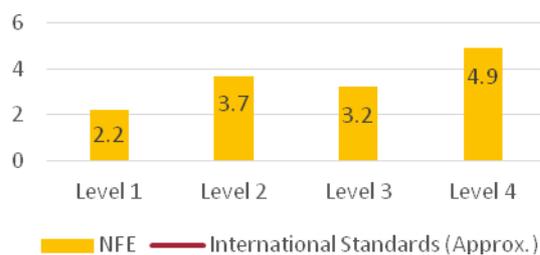


Students were then given simple passages to read, and asked five questions seeking to validate their comprehension; marks are given

out of five. The passage was broadly something a pupil in grade 2-3 (by international standards) could be expected to comprehend completely; once again, some challenges were apparent in the capacity of NFE students to perform basic literacy tasks.

Reading Comprehension – Intermediate

Figure 59 - NFE Pupil Performance on Reading Comprehension – Intermediate



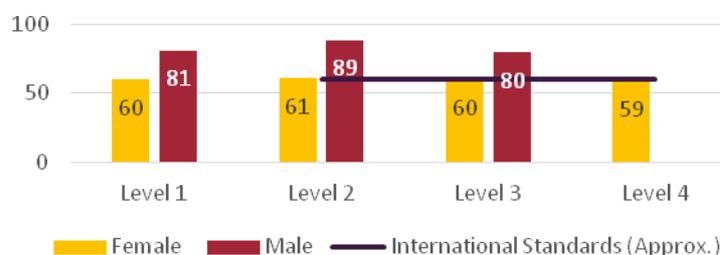
Students were then given slightly more complex passages to read, and asked five questions seeking to validate their comprehension; marks are given out of six. The passage was broadly something a student in grade 3-4 (by international standards) could be expected to comprehend completely; once again, some

challenges were apparent in the capacity of NFE students to perform basic literacy tasks.

Pupil Literacy Proficiency by Gender

Letter Identification

Figure 60 - NFE Pupil Performance on Letter Identification by Gender



It should be noted that the predominance of females enrolled in the NFE sector is likely to skew the data analysed for this particular subsector of Puntland’s education system.

Interestingly, for the grade levels where males were present to be assessed, they scored significantly higher than females on the letter identification task. Again, though, the relatively small sample size collected may have impacted these figures. All the same, this would appear to indicate that men are coming in to NFE with high levels of literacy skills.

Invented Word

Figure 61 - NFE Pupil Performance on Invented Word by Gender



Females were found to experience relatively more challenges than their male counterparts from Grade 1 to Grade 3 at NFE schools when undertaking the invented word pronunciation task of the

EGRA, though differences in some cases appear to be minor. However, the relatively small sample of male students (given low rates of male participation in NFE) may have had an effect on the data presented here.

Reading Comprehension - Basic



Figure 62 - NFE Pupil Performance on Reading Comprehension – Basic by Gender

Though males represent a small portion of the available sample within the NFE subsector, the figures indicated here show consistent scores in reading comprehension across

both genders.

Reading Comprehension - Intermediate

Figure 63 - NFE Pupil Performance on Reading Comprehension – Intermediate by Gender



From Grade 1 to Grade 2, male and female performance appears to be largely consistent, with some differences beginning to merge in grades 3-4.

By and large, however, it does not appear that women are at a systemic disadvantage to their male counterparts in the NFE sector; however, limited sample sizes may pose some challenges to the representativeness of all data.

Pupil Literacy Proficiency by Urban-Rural Split

Letter Identification

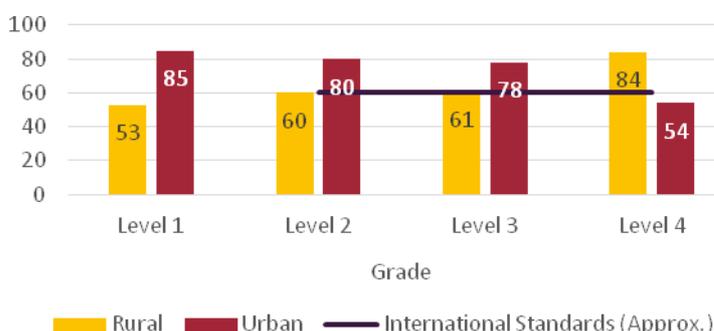


Figure 64 - NFE Pupil Performance on Letter Identification by Urban-Rural Split

Letter identification was found to be a challenge for students at rural schools, from Grade 1 to Grade 3.

Invented Word

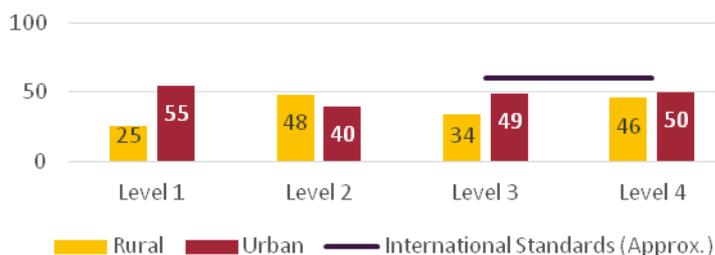


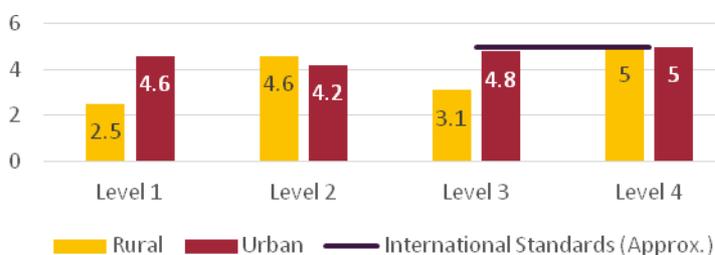
Figure 65 - NFE Pupil Performance on Invented Word by Urban-Rural Split

Pronunciation of invented words appeared to be a concerning challenge for rural students enrolled in Grade 1 and Grade 3 particularly. Urban students in those

categories excelled over rural students to a large degree.

Reading Comprehension - Basic

Figure 66 - NFE Pupil Performance on Reading Comprehension – Basic by Urban-Rural Split

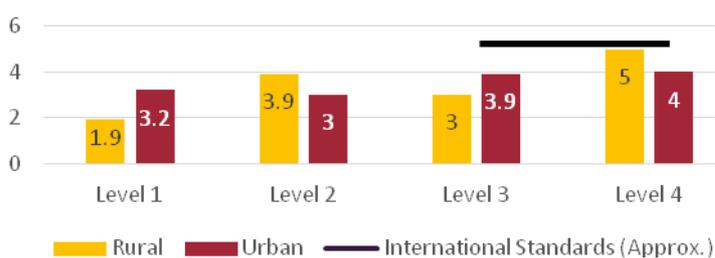


The basic reading comprehension task was scored both perfectly and to an equal level by urban and rural students enrolled in Grade 4. However, in Grades 1 - 3, rural students appear to be somewhat behind their urban

counterparts.

Reading Comprehension - Intermediate

Figure 67 - NFE Pupil Performance on Reading Comprehension – Intermediate by Urban-Rural Split



In comparing capacity to carry out intermediate reading comprehension tasks, NFE students at rural schools appeared to have mixed results in relation to urban students. Grade 2 rural students

performed significantly better than urban students but the results were reversed at the Grade 3 level. It is difficult to draw too many conclusions from this data, given the limited sample size available at the higher levels.

Pupil Performance on Basic Numeracy Examinations

Pupils were also given basic numeracy and mathematics tests. The results of these tests have been included below.

Counting

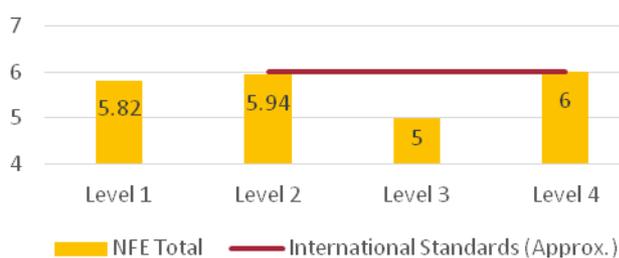


Figure 68 – NFE Pupil Performance on Counting

The numbers above correspond broadly to the ability of a student to count in a linear fashion; marks are given out of five. Students in the NFE sector appeared to have little difficulty performing basic counting tasks.

Read the Number

Figure 69 – NFE Pupil Performance on Read the Number

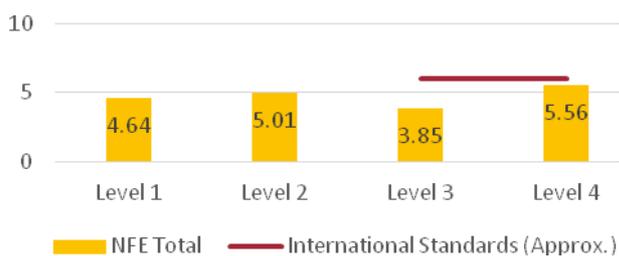


some difficulty.

This exercise presented a series of two-digit numbers and required the students to identify and read out the number; marks are given out of six. NFE students appeared to have limited difficulty with this task, though some level 3 examinees appeared to have

Comparing Numbers

Figure 70 – NFE Pupil Performance on Comparing Numbers



This exercise assessed students' ability to recognise which two-digit number (of two) is greater; marks are given out of six. The capacity to perform this is broadly expected to be achieved by the time a student completes grade 2-3 (Common Core State Standards Initiative).

Addition

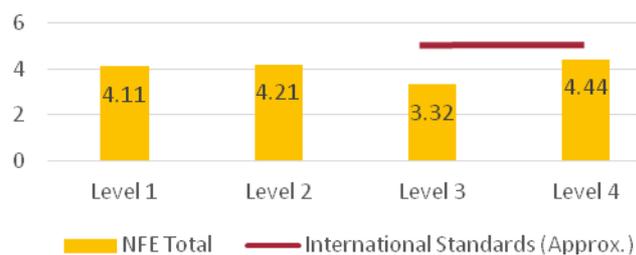


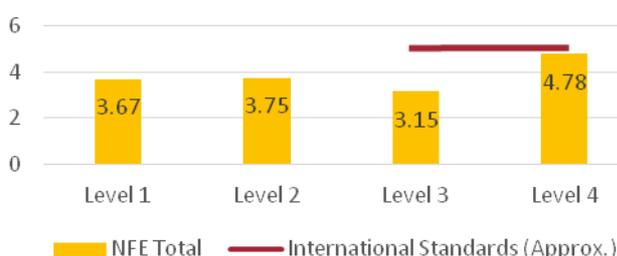
Figure 71 – NFE Pupil Performance on Addition

Students were given a set of five separate addition problems, consisting of both single-digit and double-digit figures; marks are given out of five. The ability to add numbers within 100 is broadly expected to be a learning outcome of

students by the end of grade 3 (Common Core State Standards Initiative). On the basis of the above figures, there does appear to be some challenges facing NFE students in their ability to solve basic numeracy problems.

Subtraction

Figure 72 – NFE Pupil Performance on Subtraction

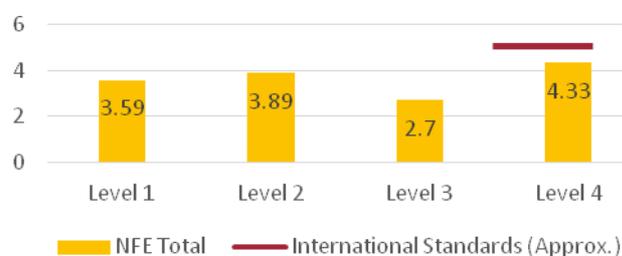


Students were then given a set of five separate subtraction problems, comprised of double-digit figures. The ability to subtract numbers within 100 is broadly expected to be a learning outcome of students by the end of grade 3 (Common Core State Standards Initiative). There is a broad upward

trend in scores - with the outlier in Mudug weighting the grade 3 average downward - which is to be expected as pupils progress through more years of education. However, it is evident that there exists continuing challenges facing students in the NFE sector in relation to their numeracy proficiency.

Multiplication

Figure 73 – NFE Pupil Performance on Multiplication

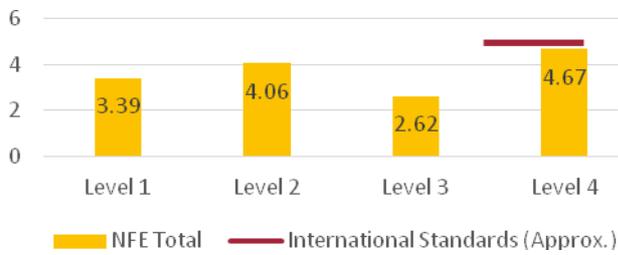


Students were further given a set of five separate multiplication problems, solely comprised of single digit-figures; marks are given out of five. The ability to multiply numbers within 100 is broadly expected to be a learning outcome of students by the end of grade 3-4

(Common Core State Standards Initiative). In line with these standards, there was an evident upward trend in results as students passed grade 3, the year at which they are expected to have the capacity to solve basic multiplication problems, though with some apparent challenges.

Division

Figure 74 – NFE Pupil Performance on Division

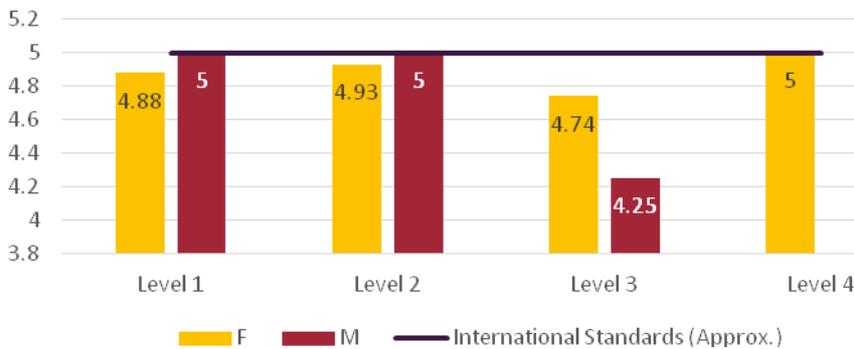


Learners were further given a set of five separate division problems, comprised of both single digit-and double-digit figures; marks are given out of five. The ability to divide numbers within 100 is broadly expected to be a learning outcome of students by the end of grade 3-4

(Common Core State Standards Initiative). The positive trend as grade level increases is promising and to be expected, yet the data does still indicate ongoing challenges related to the ability of students in the NFE subsector to undertake basic numerical tasks.

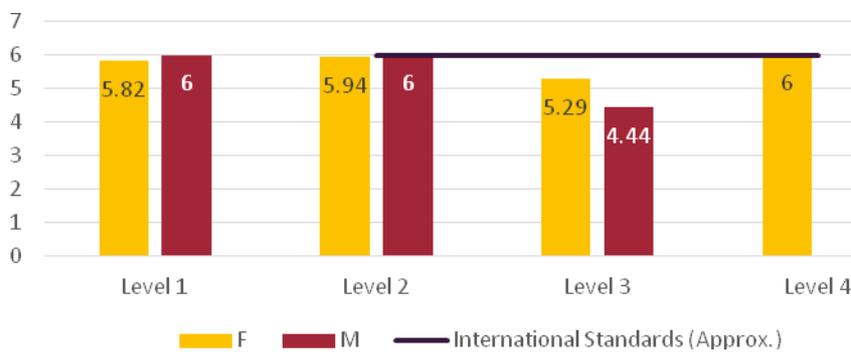
Counting

Figure 75 - NFE Pupil Performance on Counting by Gender



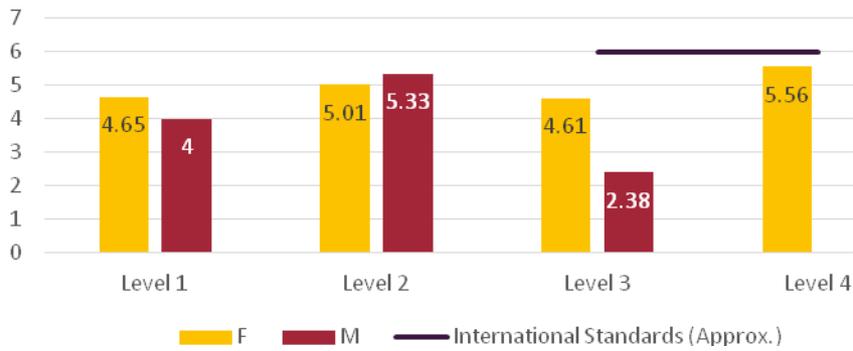
Read the Number

Figure 76 - NFE Pupil Performance on Read the Number by Gender



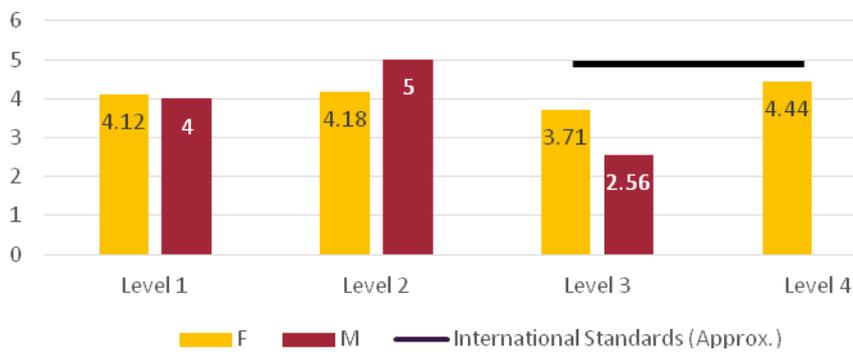
Which is Greater

Figure 77 - NFE Pupil Performance on Which is Greater by Gender



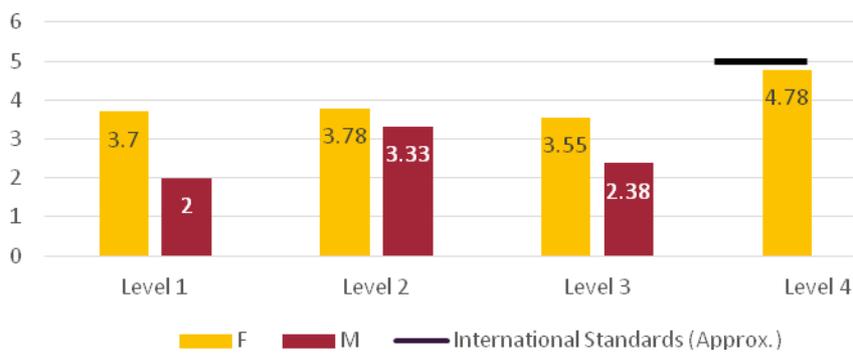
Addition

Figure 78 - NFE Pupil Performance on Addition by Gender



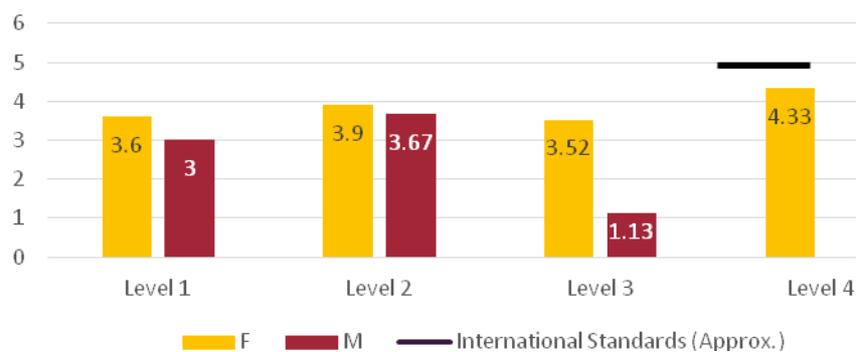
Subtraction

Figure 79 - NFE Pupil Performance on Subtraction by Gender



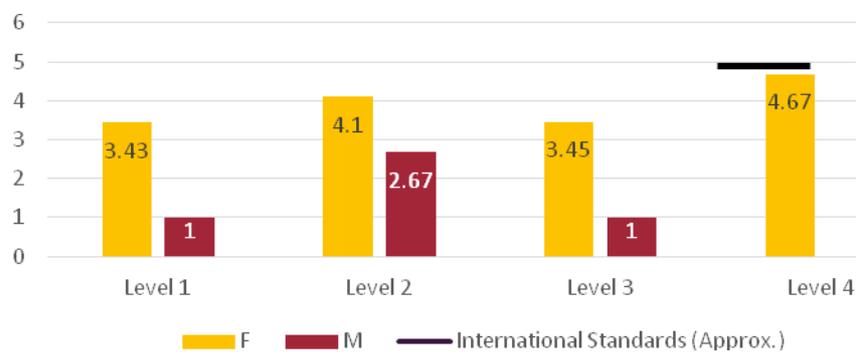
Multiplication

Figure 80 - NFE Pupil Performance on Multiplication by Gender



Division

Figure 81 - NFE Pupil Performance on Division by Gender x



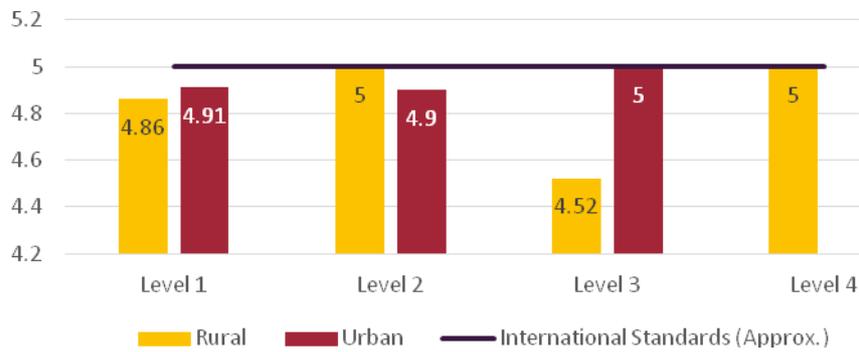
Given the low percentage of participating men, it may be challenging to make overarching arguments from the small sample of examinations collected. However, it does appear that female participants broadly outperformed their male colleagues.

Numeracy Results by Urban-Rural Divide

Table 85 - Numeracy Results by Urban-Rural Divide

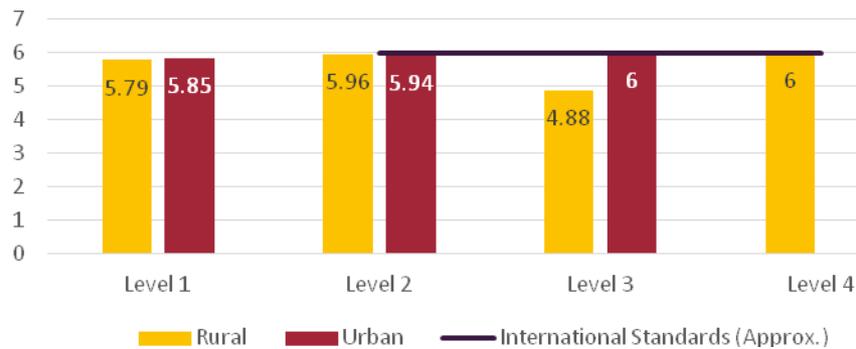
Counting

Figure 82 – NFE Pupil Performance on Counting by Urban-Rural Divide



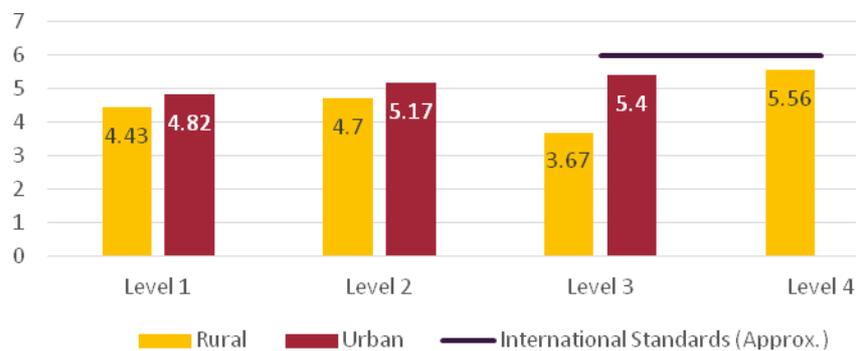
Read the Number

Figure 83 - NFE Pupil Performance on Read the Number by Urban-Rural Divide



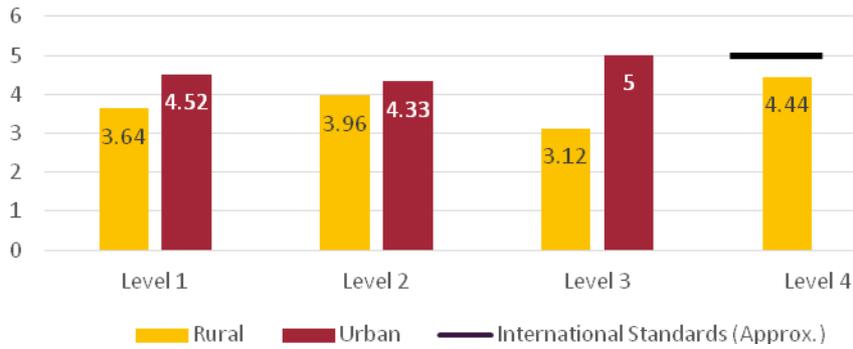
Which is Greater

Figure 84 - NFE Pupil Performance on Which is Greater by Urban-Rural Divide



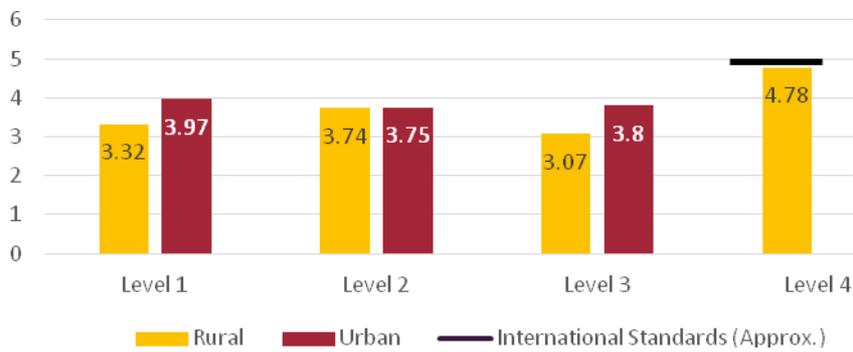
Addition

Figure 85 - NFE Pupil Performance on Addition by Urban-Rural Divide



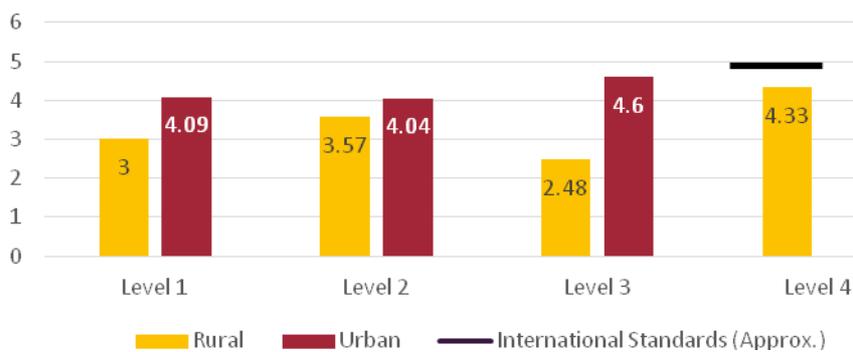
Subtraction

Figure 86 - NFE Pupil Performance on Subtraction by Urban-Rural Divide



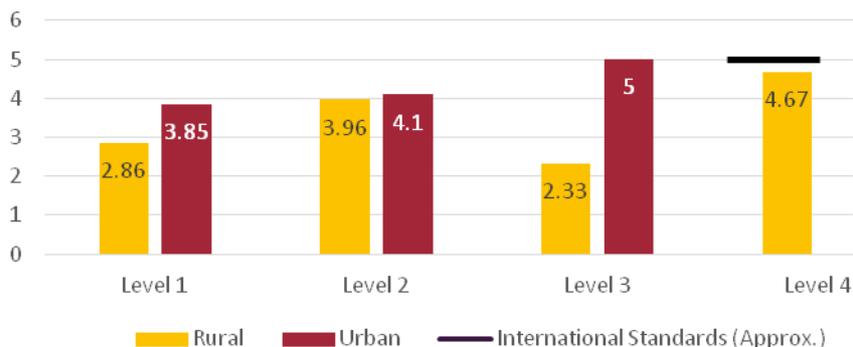
Multiplication

Figure 87 - NFE Pupil Performance on Multiplication by Urban-Rural Divide



Division

Figure 88 - NFE Pupil Performance on Division by Urban-Rural Divide



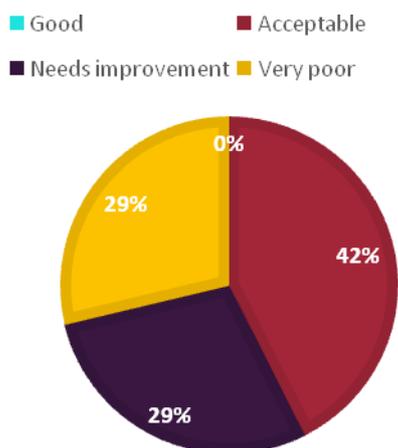
Similar to other subsectors, it does appear that urban students outperformed their rural counterparts.

Across the NFE sector, however, there appear to be broad challenges in learning outcomes, raising questions as to the standards used to promote or hold students back; furthermore, rural-urban gaps in attainment remained within NFE provision.

Standard of Facilities

Enumerators evaluated the standard of visited NFE facilities, with the following broad results:

Figure 89 – NFE Standard of Facilities



NFE performed particularly poorly in standards of visited facilities, Ayn and Sool receiving the lowest scores of visited regions. The summary score comprised 2.0, well short of the passing mark of 3.0.

Summary Score:	2.0
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Efficiency

Internal Efficiency

Internal efficiency deals with measuring retention, dropout, and repetition across a specific educational subsector. In some cases, it also deals with throughput – i.e. the percentage of students finishing one level of education and beginning another.

WWI Needs Assessment Completion Rates

The table below shows completion of school year 2013/2014 and 2014/2015 in NFE centers by course and region:

Table 86 – WWI Completion Rates (NFE centers assessed, 2015)

	Basic literacy and numeracy skills			Intensive English Course			Accelerated learning/Catch up education		
	2013/2014	2014/2015	% Completion	2013/2014	2014/2015	% Completion	2013/2014	2014/2015	% Completion
Saanag	155	254	164%	106	91	86%	20	24	120%
Cayn	16	20	125%	12	18	150%	18	20	111%
Sool	35	35	100%	50	40	80%	0	0	0%
Bari	153	262	171%	0	0	0%	0	0	0%
Karkaar	777	604	150%	60	60	100%	0	0	0%
Haylan	60	66	211%	75	90	120%	0	0	0%
Nugaal	142	90	63%	0	0	0%	0	0	0%

The Table shows that in all the 7 regions where the assessment was conducted, Basic Literacy and Numeracy Skills was offered in 2013/14 and in 2014/15. On the other hand, Intensive English Course was not offered in 2 of the regions, i.e. Bari and Nugaal, while Accelerated Learning/catch up education was only offered in Sanaag and Cayn.

The findings show high completion rates across the three courses offered. In Basic Literacy and Numeracy, the highest completion rate was reported in Haylan region (211%), followed by Bari region (171%) while the lowest was indicated in Nugaal region (63%). Cayn region reported the highest completion rate in the Intensive English Language course (with 150%) followed by Haylan region (with 120%). Sanaag reported the higher completion rates (120%) in Accelerated Learning as compared to Cayn (111%). Completion rates of more than 100% likely indicate growth in class sizes as the year progresses, with more people attending class at the end of the school year than the beginning.

EMIS Insights - Repeaters

Table 87 - EMIS Insights²⁵ - NFE Repeaters

	%	
Level 1	0.96%	Similar to primary data, reported rates of repetition remain low among NFE centres. However, given the challenges, many NFE students were found to have problems with basic literacy and numeracy tasks; the criteria against which NFE students are evaluated and graduated remain unclear. This raises further questions as to the efficiency, quality, rigour, and relevance of NFE delivery.
Level 2	1.78%	
Level 3	2.08%	
Level 4	2.29%	
NFE Total	1.49%	

²⁵ This is based on the 2015 data which was the most recent EMIS data Carfax were given access to that detailed NFE repetition rates.

Secondary Education

Equity & Access Measures

Limited data outside of broad male-female enrolment rates was available to the ESA team, while data casting light on the presence of other potentially marginalised groups (e.g. IDPs, minority clans, etc.) was not available in EMIS or other studies. Some steps were taken to evaluate the equity and access afforded some groups through primary data collection, but these efforts only had the resources to provide a broad overview of selected groups. This data has been analysed and presented, where available, below:

IDPs Enrolment

Table 88 – SE IDPs Enrolment

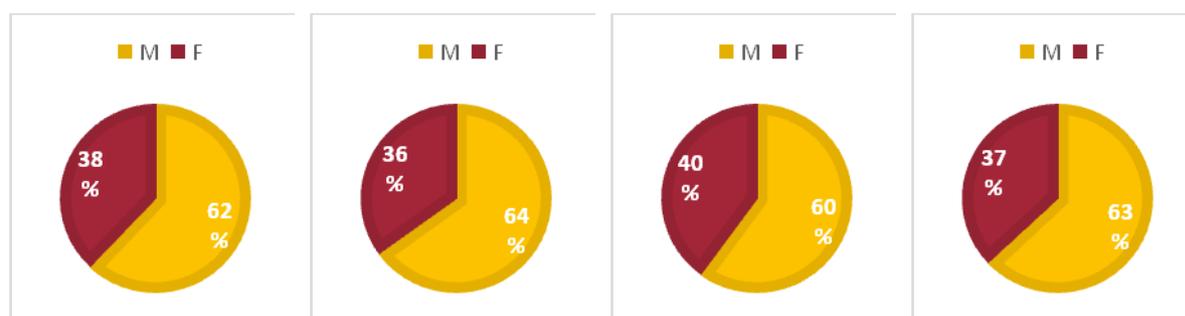
	IDP as % of Visited School population	IDPs as % of Puntland Population
Secondary	0.11%	2% - 5%

IDPs comprised a disproportionately low percentage of the visited secondary school population, representing only 0.1% of visited school populations. Earlier analyses of average school fees to attend secondary schools (c \$200 USD per year) may be discouraging IDPs from transitioning to secondary school, given the reported trends of child labour and unemployment within this group.

Male-Female Enrolment

Male-female enrolment ratios from EMIS data, lesson observations, and ESA school data forms were analysed and collated below:

Figure 90 – 2012/13 EMIS - SE Male-Female Enrolment Figure 91 – 2015/16 EMIS - SE Male-Female Enrolment Figure 92 - Lesson Observations - SE Male-Female Enrolment Figure 93 - School Data Form - SE Male-Female Enrolment



While findings within the secondary sector were relatively consistent, variations between instruments may be explainable by the relatively small sample of secondary schools studied. However, it appears that girls – like IDPs – may be facing challenges in access and equity within the secondary subsector; rates of participation have a gap of c. 30%, with Hayland facing particular challenges.

Urban-Rural Enrolment

The urban-rural divide in educational resources was frequently mentioned as a challenge within Puntland. This was no different within the secondary sector:

Table 89 – SE Urban-Rural Enrolment

	%					
	2015 EMIS ²⁶ Secondary Enrolment		UNFPA 2014 Population		Puntland Government 2016 Population	
	Urban	Rural	Urban	Rural ²⁷	Urban	Rural
Ayn	100%	0%	-	-	-	-
Bari	96%	4%	66%	34%	55%	45%
Buudoole	-	-	-	-	33%	67%
Gardafuu	0%	100%	-	-	-	-
Hayland	43%	57%	-	-	-	-
Karkaar	94%	6%	-	-	-	-
Mudug	77%	23%	53%	47%	39%	61%
Nugaal	75%	25%	35%	65%	35%	65%
Sanag	63%	37%	29%	71%	21%	79%
Sool	84%	16%	37%	63%	24%	76%

Secondary enrolment skews heavily toward urban centres in every region. This may be a result of increased poverty (recall higher fees charged by secondary schools), and a rural education sector that is still struggling to provide basic and primary education for all of its students.

Other Groups

Substantial challenges were encountered throughout this study in finding data on other minority groups (e.g. clans and ethnic groups), given taboos surrounding the subject described by many members of the Ministry and enumeration teams. As a result, limited additional data could be found or collected shedding light on the equity and access afforded these groups. However, this lack of data indicates a potential area of focus in data collection capacity building activities in the next ESSP.

²⁶ The 2015 EMIS data were the most recent data that Carfax had access to that broke down secondary school enrolment by region an urban/rural location

²⁷ Source: (UNFPA, 2014). The rural figures in this table include both rural and pastoralist population counts.

Quality of Instruction

Percentages of trained vs untrained teachers (2015 JRES data)

Table 90 – SE- Percentages of trained vs untrained teachers (2015 JRES data)

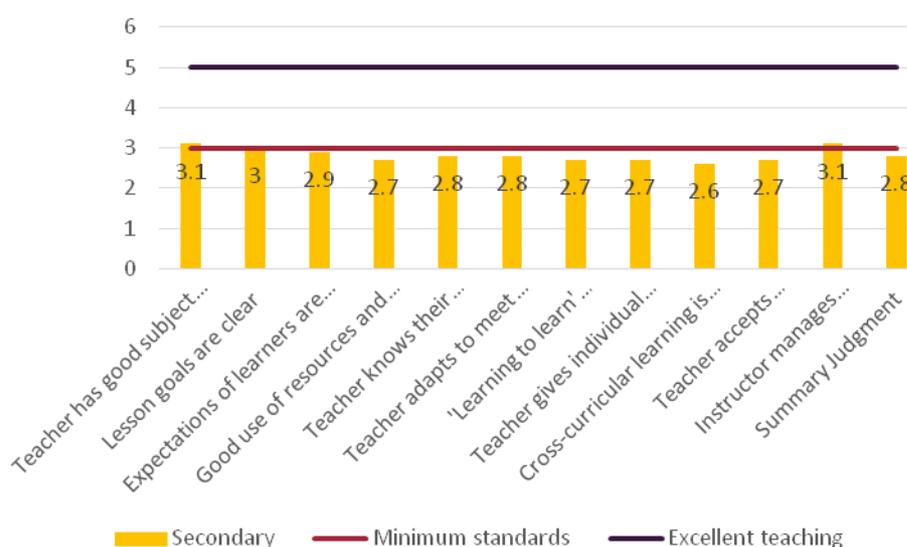
	Sector	Trained			Untrained		
		M	F	Tot.	M	F	Tot.
Frequency	Secondary	401	11	412	254	7	261
%		61%	61%	61%	39%	39%	39%

These figures were reported in the 2015 JRES, indicating that 61% of secondary school teachers hold appropriate training as defined by the Ministry of Education.

Observed Instructional Quality

Table 91 - Observed instructional quality

Figure 94 - SE Observed Instructional Quality



In lesson observations, the secondary sector fared somewhat better than primary and NFE (receiving a 2.8), though still did not receive a passing mark. Once again, standards in Nugaal and Ayn were at the bottom of the table, with Hayland again coming first; once again, the low sample in Hayland may have impacted on the representativeness of the marks given above.

Pupil-Teacher Ratio

Table 92 – SE- Pupil-Teacher Ratio teacher ratio

	Observed PTR	2013 EMIS PTR	2016 EMIS PTR
Secondary	46:1	26:1	27:1

The observed pupil-teacher ratio in secondary schools was much higher than that reported in EMIS in 2015. This may be a result of the relatively low sample of secondary schools visited. This may be an

interesting area for further study.

Presence of Educational Materials in Secondary School Classrooms

Enumerators marked whenever they entered a classroom and there were no books or learning materials for students:

Table 93 – SE Presence of Educational Materials in Classrooms

	%	
	No books observed	Teachers reporting no books
Secondary	74%	91%
Ayn	25%	
Bari	89%	
Hayland	100%	
Mudug	0%	
Nugaal	100%	
Sanag	100%	

Secondary schools fared worse than other subsectors in this respect, reporting 31% fewer classrooms with books than primary schools. However, this may be a result of the limited sample visited; an alternative explanation is unequal resource allocation, with international organisations and governments focussing on primary education at the expense of secondary schools.

Teachers were also asked whether they used textbooks in their classrooms, with 91% indicating they did not. These findings once again pose questions about the capacity of the sector to distribute resources, and oversee educational delivery across the state.

The Waxbarashadu Waa Iftiin (WWI) Needs Assessment study reported the pupil-textbook ratio in studied schools to comprise 2:1; however, the study relied heavily on self-reported data. EMIS data, presented a picture more consistent with that collected by ESA teams: 20 students were noted as sharing each textbook in mathematics, Arabic, and Somali.

These figures appear to indicate widespread challenges in the availability of secondary textbooks.

Teacher subject knowledge

Secondary teachers were also given basic Somali tests; the same examination anyone wishing to graduate from GTEC with a primary teaching certificate must pass. The passing mark for these exams was 75%. A Somali language exam, set at minimum knowledge standards of Primary teachers, was thought an appropriate measure across all teachers in all secondary subjects. Somali, even in cases where English is meant to be the medium of instruction, is often still the primary language of instruction; one study by CARE found that many secondary teachers still teach primarily in Somali, even in English-language classrooms. As such, if a teacher is unable to effectively communicate and write in Somali, a basic prerequisite for communicating subject knowledge in any subject, their teaching effectiveness in any subject will likely be impacted.

Table 94 – SE Teacher Somali Language Subject Knowledge

Secondary	63%	Secondary teachers performed poorly overall, with only Mudug receiving an average pass mark (77%). On average, however, it appears that many Secondary teachers in Puntland do not meet even the minimum standards for Somali language subject knowledge and literacy set by the government of Puntland to be a teacher.
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Pupil Performance on Basic Literacy Examinations

Secondary students were given basic Somali reading comprehension assessments, seeking to establish basic literacy levels. These examinations were suitable for grade 3-4 primary pupils. Students did not have any difficulty passing the short questionnaires; there were no distinctions between male and female, nor rural and urban students.

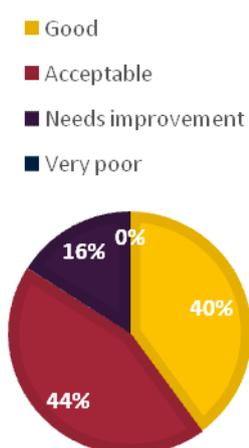
Pupil Performance on Basic Numeracy Examinations

Secondary students were given basic numeracy assessments, seeking to establish basic numeracy levels. These examinations were suitable for grade 3-4 primary pupils. Students did not have any difficulty passing the short questionnaires; there were no distinctions between male and female, nor rural and urban students.

Standard of Facilities

Enumerators were also asked to comment on the standard of facilities in visited secondary classrooms, with the following results:

Figure 95 - Standard of facilities in SE



Within the secondary sector, the results for the assessment of facilities were relatively high; however, this may have resulted from the relatively low sample of schools visited, and may not be representative of the wider education system. More discussion on facilities, and what enumerators identified as being in particular need, can be found in later sections of this document.

Summary Score: 3.2

WWI Insights

Table 95 – WWI Standard of facilities in SE

Class-per-Pupil Ratio	32:1 (MoE&HE Guidelines 40:1)
% Schools as Temporary Structures	16%
Pupil-Desk Ratio	2:1
Classrooms too Hot	29%
Schools with a Library	7%
Schools with Access to Safe Water	50%
Pupil-Latrine Ratio	40:1 (50:1 for boys and 33:1 for girls)

Schools with Hand Washing Facilities	21%
Schools with Properly Managed Rubbish Disposal Areas	22%

Taken together, these indicators would appear to point to some challenges in the standard of facilities at studied schools, which may be broadly representative of the wider state of educational facilities in Puntland.

Efficiency

Internal Efficiency

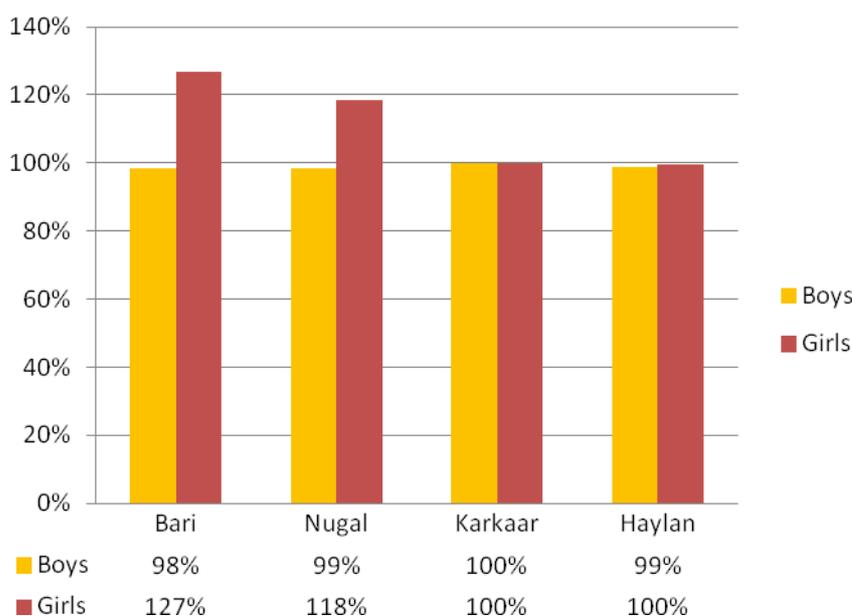
Internal efficiency deals with measuring retention, dropout, and repetition across a specific educational subsector. In some cases, it also deals with throughput – i.e. the percentage of students finishing one level of education and beginning another.

WWI Insights

The overall completion rate for the school year 2014/2015 was 107% (99% for boys and 115% for girls). Ideally, the completion rate should not exceed 100%. It is assumed that this is the result of drop-ins (*students transferring from other schools mid-year, out of schools children dropping back in to the school system, or new enrolment during migration by the pastoralists*); or grade repetition (*which is normally rare at the secondary school level*). Out of the 14 secondary schools assessed, 8 (57%) had completion rates of 100% for boys and girls; 2(14%) had completion rates above 100% and 3(21%) had completion rates below 100%.

The figure below on regional averages shows that girls generally had high completion rates: 127% (Bari), 118% (Nugal), and 100% (Karkaar and Haylan).

Figure 96 - Regional Averages of School Year (2014/2015) Completion Rates of Secondary Schools Assessed, by Gender



EMIS Insights

Table 96 - EMIS Insights on SE Rates of Repetition²⁸

	%	
	2013	2015
Form 1	5.21%	4.56%
Form 2	7.39%	4.28%
Form 3	4.55%	5.92%
Form 4	1.58%	0.57%
Secondary Total	5.06%	4.12%

Rates of repetition, again, appeared to be low, though have been dropping in recent years.

Rates of Graduation

Table 97 - EMIS Insights on SE Rates of Graduation²⁹

Total Form 4 Enrolment (2014)	3,072
Total Secondary Examinees (2014)	2,560
Secondary School Examinees as % of University Enrolment (2015)	26%

The percentage of HEI students secondary graduates comprise conform to the c. 25% one would expect in an undergraduate university system offering largely 4-year degrees and some graduate study. This would appear to indicate the once students finish secondary school, they are

likely to transition to one of the state's universities. These students are likely to be among the wealthier in the state, with substantial resources available for their education.

²⁸ The 2015 EMIS data were the most recent data Carfax had access to that listed repetition rates in SE.

²⁹ The 2015 EMIS data were the most recent data Carfax had access to that listed graduation rates in SE.

Technical and Vocational Education and Training

Equity & Access Measures

Limited data outside of broad male-female enrolment rates was available to the ESA team, while data casting light on the presence of other potentially marginalised groups (e.g. IDPs, minority clans, etc.) was not available in EMIS or other studies. Some steps were taken to evaluate the equity and access afforded some groups through primary data collection, but these efforts only had the resources to provide a broad overview of selected groups. This data has been analysed and presented, where available, below:

IDPs Enrolment

Table 98 - IDPs Enrolment

	IDPs as % of Visited institutions	IDPs as % of National population
TVET	34.9%	2% - 5%

IDPs appeared to be relatively well-represented within the TVET sector. This is thought to be a result of two factors:

1. A relatively small sample of institutions was visited, potentially skewing IDP percentages;
2. TVET remains largely project based in Puntland, with NGOs and educational partners generally targeting provision at disadvantaged groups. This may have resulted in higher percentages of IDPs in this sector than others.

In either case, within the TVET institutions visited, IDPs appear to be relatively well represented.

Male-Female Enrolment

Male-female enrolment ratios from EMIS data, lesson observations, and ESA school data forms were analysed and collated below:

Table 99 - Male-Female Access and Equity

Figure 97- 2014 EMIS - TVET Male-Female Enrolment

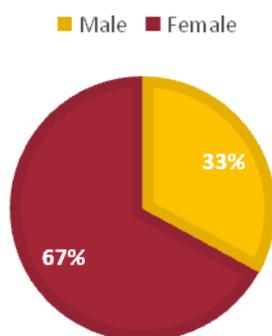


Figure 98 - Lesson Observations - TVET Male-Female Enrolment

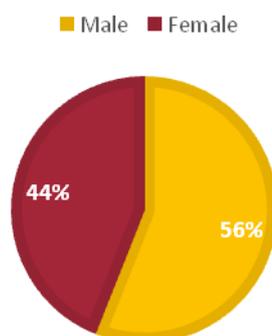
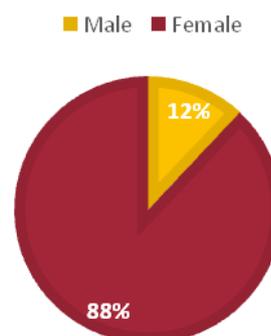


Figure 99 - School Data Form - TVET Male-Female Enrolment



In the institutions visited, more women than men were found, opposite to what is registered in EMIS. Once again, a relatively small sample of visited TVET institutions may have skewed findings toward the presence of more women. Across the sector, however, it seems that women are relatively well represented – as opposed to the secondary and HEI sectors.

Urban-Rural Enrolment

The urban-rural divide in educational resources was frequently mentioned as a challenge within Puntland. This was no different within the TVET sector:

Table 100 – Urban-Rural Enrolment

	%	
	2014 EMIS Enrolment ³⁰	
	Urban	Rural
All TVET	100%	0%

100% of TVET institutions are in Urban areas, pointing to widespread inequities in access for rural communities. This indicates an area of potential concern and focus moving forward.

Other Groups

Substantial challenges were encountered throughout this study in either finding data on other minority groups (e.g. clans and ethnic groups), given taboos surrounding the subject described by many members of the Ministry and enumeration teams. As a result, limited additional data could be found or collected shedding light on the equity and access afforded these groups. However, this lack of data indicates a potential area of focus in data collection capacity building activities in the next ESSP.

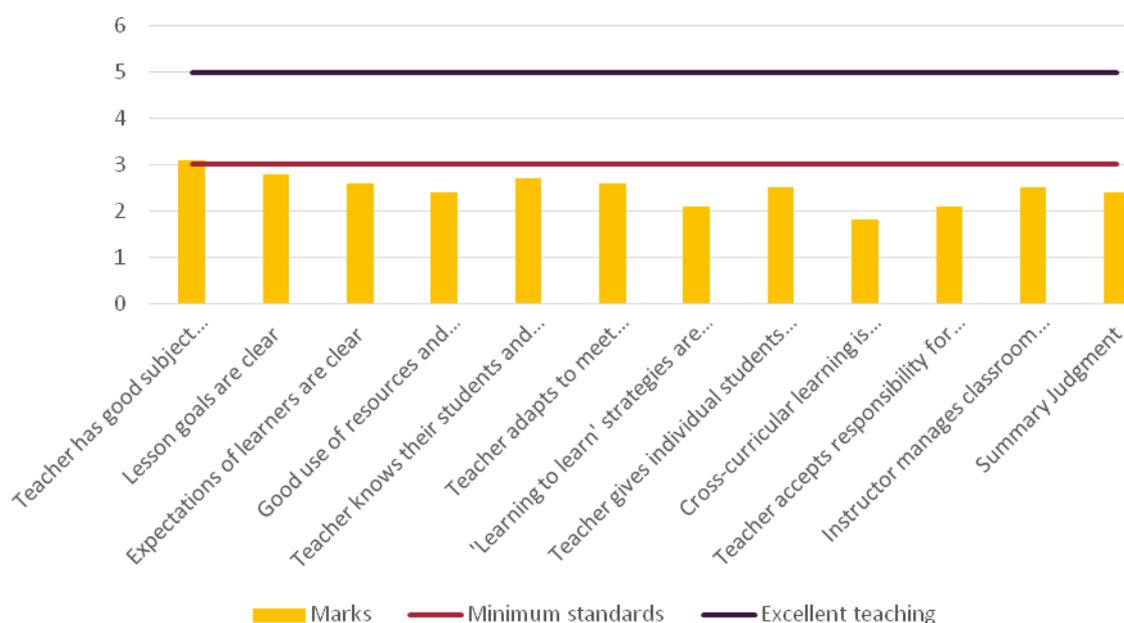
Quality of Instruction

Observed Instructional Quality

Enumerators observed a number of TVET lessons, marking the quality of instruction across the given rubric:

³⁰ The 2014 EMIS data were the most recent data made available to Carfax that broke TVET enrolment down by urban/rural location.

Figure 100 – TVET Observed Instructional Quality



The TVET sector fared about as poorly as the NFE, with an average mark of 2.4; short of the required passing mark of 3. One area in particular fared poorly, namely the provision of cross-curricular learning. One enumerator indicated that the students were learning insufficient skills to establish their own businesses, potentially impeding their success in using their skills to provide for families.

Pupil-Teacher Ratio

Table 101 – TVET Pupil-Teacher Ratio

	Observed PTR	2013/14 EMIS PTR ³¹
TVET	25:1	35:1
Karkaar	54:1	41:1
Mudug	20:1	42:1
Nugaal	17:1	39:1

Within TVET centres once again, the small sample may pose some challenges to the representativeness of collected data, explaining the discrepancy between EMIS figures and those given by enumerators. On the basis of lesson observation forms, it appears that the visited TVET programmes have a relatively low pupil-teacher ratio.

Presence of educational materials in classrooms

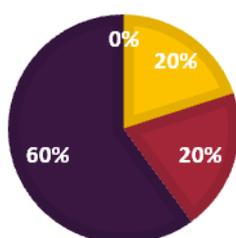
Enumerators were asked to indicate whether there were any books in visited classrooms. 80% of TVET institutions visited did not have books available to students; however, given the practical nature of relevant instruction, this may not be so much of a concern.

³¹ TVET PTR ratio data for 2015/16 was not available through EMIS.

Standard of facilities

Figure 101 – TVET Standard of facilities

- Good
- Acceptable
- Needs improvement
- Very poor



Standard of facilities were marked by enumerators, and TVET centres as a whole did not appear to perform well, with an average mark of 2.6; short of the required passing mark of 3.0. Enumerators broadly mentioned missing equipment, or the need to upgrade facilities as some of the primary concerns in TVET centres.

Summary Score:	2.6
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WWI Insights

Table 102 - WWI Insights on TVET Standard of Facilities

% Temporary Learning Spaces	40%
Classroom-Trainee Ratio	1:28
Condition of Workshops and Equipment	Fair

Qualifications and Examinations

The TVET sector remains largely outside the supervision of the government, with limited oversight and QA input. The majority of provision appears to be run largely by NGOs and other organisations, and is focussed primarily on short-term programmes. As such, it is unclear whether the degree to which the qualifications and programmes currently being offered are relevant to the employment market.

Efficiency

Internal Efficiency

Internal efficiency deals with measuring retention, dropout, and repetition across a specific educational subsector. In some cases, it also deals with throughput – i.e. the percentage of students finishing one level of education and beginning another.

WWI Insights

Completion within the school years 2013/14 and 2014/15 was impressive with 106% of the trainees completing the various courses. The completion rates for both male and female learners were high, at 99% and 113%, respectively.

Employment Outcomes

Employment outcomes within the TVET sector – arguably one of the primary measures of TVET effectiveness – have received some attention in recent years. One tracer study (of the DVTIES project from 2012), seeking to establish employment rates of TVET for informal employment trainees, found that 79% of studied trainees had secured their first jobs within 3 months of graduation. 68% of survey respondents indicated that their income had improved since training, and 64% of all respondents indicated their current income was enough to meet their needs. The study did not, however, seek to establish rates, types, or remuneration of employment prior to participation in TVET; as such, it is unclear what the relative improvements were to these measures of employment impact. Furthermore, it is unclear what percentage of all TVET provision in Puntland this study covered; as such, its representativeness could not be established.

The MoE&HE along with ESC partners undertook a labour market survey in Puntland; this survey held some indications as to the alignment of current TVET provision to market requirements (some challenges were identified).

Thirty-four ex-TVET graduates were asked about their employment status after graduating from the institutes. Overall, 53% were employed, 41% were self-employed (high informal employment rate), 3% underemployed and 3% unemployed. By location, Galkayo had the highest proportion (83%) of graduates employed while Burtinle had the highest proportion (67%) of self-employment. For details see Figure 2.

The TVET graduates interviewed reported that their average wage was slightly higher than those who did not follow the TVET path and were doing similar jobs. This information was also confirmed by the business enterprises interviewed where graduates were employed.

The relevance and adequacy of the trade skills was also measured through the utilisation of acquired skills at the workplace. All the 34 ex-TVET graduates were asked whether they are using the core skills learned from the TVET program to make money. Overall, 75% of the graduates utilize the skills fully while 19% partially utilize the skills. Only 6% of the graduates reported not to be using the skills learnt to make money.

These offer some encouraging indications as to the relevance of TVET training, and its appropriateness to market requirements.

Higher Education

Equity & Access Measures

Limited data outside of broad male-female enrolment rates was available to the ESA team, while data casting light on the presence of other potentially marginalised groups (e.g. IDPs, minority clans, etc.) was not available in EMIS or other studies. Some steps were taken to evaluate the equity and access afforded some groups through primary data collection, but these efforts only had the resources to provide a broad overview of selected groups. This data has been analysed and presented, where available, below:

IDPs Enrolment

Table 103 – HE IDPs Enrolment

	IDPs as % of visited institution population	IDPs as % of National population
HEI	0.3%	2% - 5%

IDPs appeared to be underrepresented within higher education institutions, comprising only 0.3% of visited institution populations, versus the estimated 2%-5% of the national population.

Male-Female Enrolment

Male-female enrolment ratios from EMIS data, lesson observations, and ESA school data forms were analysed and collated below:

Table 104 - Male-Female Access and Equity

Figure 102 – 2015/16 EMIS - HEI Male-Female Enrolment

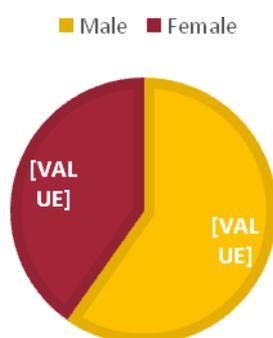
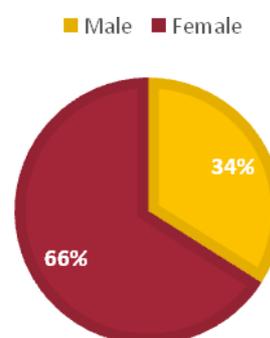


Figure 103 - School Data Form - HEI Male-Female Enrolment



Within the higher education sector, women comprised a higher percentage of institutions visited. However, within EMIS, it seems that women may be underrepresented across the whole sector. These findings may illuminate some challenges women face in standards of equity and access in higher education.

Urban-Rural Enrolment

The urban-rural divide in educational resources was frequently mentioned as a challenge within Puntland. This was no different within the HEI sector, with 100% of HEIs residing in Urban areas. The rate of enrolment of students from Urban areas was not, however, apparent from the provided data.

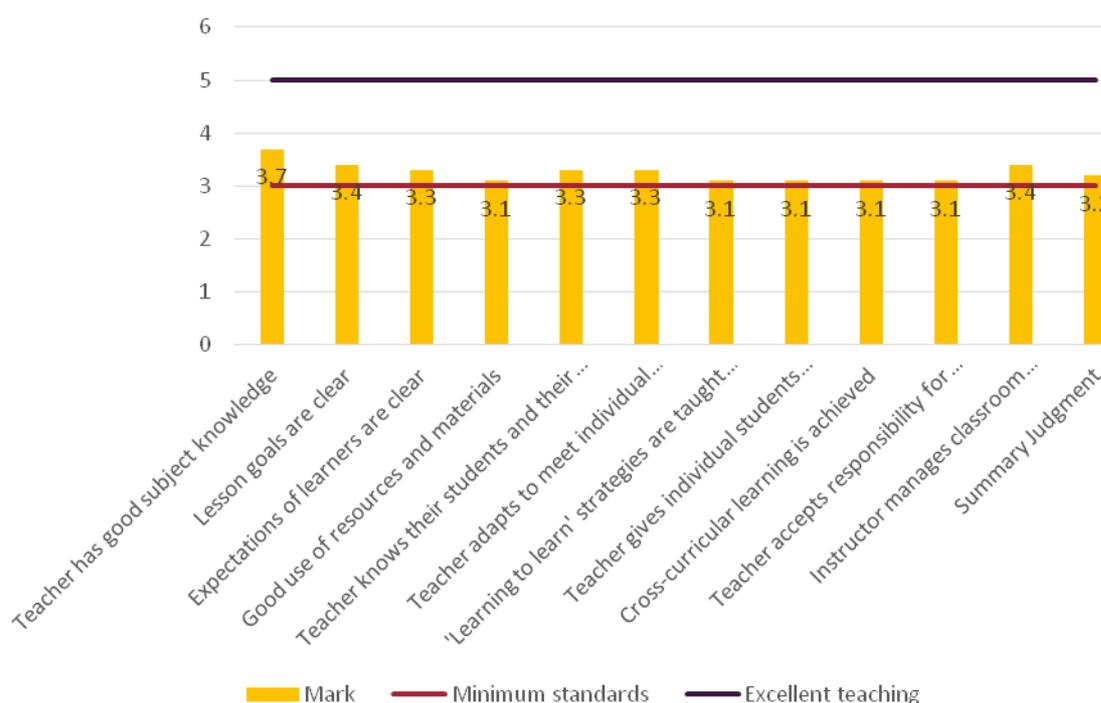
Other Groups

Substantial challenges were encountered throughout this study in either finding data on other minority groups (e.g. clans and ethnic groups), given taboos surrounding the subject described by many members of the Ministry and enumeration teams. As a result, limited additional data could be found or collected shedding light on the equity and access afforded these groups. However, this lack of data indicates a potential area of focus in data collection capacity building activities in the next ESSP.

Observed Instructional Quality

Lesson observations were undertaken in four universities in Bari, with the following results:

Figure 104 – HE Observed Instructional Quality



The small sample and higher resources afforded such institutions are likely to have had an impact on the above findings. However, it appears that within the institutions visited, a passing mark of 3.2 was achieved within lesson observations.

Presence of Educational Materials in Classrooms

Table 105 – HE Presence of Educational Materials in Classrooms

	No books for students	14% of HEI classrooms were reported not to have reference books for students; however, this is not considered to be such a concerns in lecture-based university classrooms.
HEI	14%	

Furthermore, it is thought that those attending such institutions tend to be better resourced, making the availability of reference books less of a challenge.

Pupil-Teacher Ratio

Table 106 – HE Pupil-Teacher Ratio

	Observed PTR	2014 EMIS PTR
HEI	29:1	17:1

Pupil-teacher ratios within visited HEI institutions were rather high. This may be explainable by the relatively low sample of relevant institutions visited, and by the fact that high pupil-teacher

ratios are common even in international universities. As such, this statistic may not be so great a cause for concern.

Standard of Facilities

The standard of facilities was evaluated by enumerators, with the following results:

Table 107 – HE Standard of Facilities

	Good	Acceptable	Needs improvement	Very poor	Summary score
HEI	86%	14%	0%	0%	3.9

Once again, HEI performed better than other subsectors. This may, again, result from high-resourced students attending them.

Special Needs Education

Some additional data was collected on the standard of access afforded children with special needs. Schools were first asked how they defined a student with special needs. Their responses were coded with the following results:

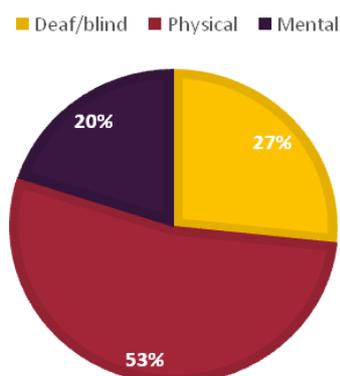


Figure 105 - How do you define a child with special needs?

For the most part, children with special needs were defined as those with physical disabilities (e.g. missing legs and arms, or other impairments of movement), the deaf and blind, or those with mental challenges. It seems, from the low rate of acknowledgement with regards to mental disability, that children with such challenges may not be receiving appropriate education.

Additional data was collected in the interest of establishing what percentage of children at each school had special educational needs.

Percentage of children in each sector reported to have special educational needs:

Table 108 - Percentage of Learners Reported to have Special Educational Needs ³²

	%		
	2013 EMIS	2015/16 EMIS ³³	ESA School Data Form
HEI	-	-	0.6%
NFE	1.4%	1.0%	1.4%
Primary	1.0%	0.8%	0.7%
Secondary	N/A	2.5%	0.4%
TVET	-	-	0.3%
Grand Total	1.3%	1.3%	0.7%

Some discrepancies between ESA and EMIS data may be explainable by the samples collected. Across the board, the percentages remained very low, indicating that children with special needs may not be accessing education within mainstream channels; it would also appear that, in relative terms, standards of access have been decreasing for those with special needs.

There are currently three SEN centres in Puntland. Two of these, one Visually Handicapped and the other Hearing Impaired centres, are in Garowe, managed by two Community Based Organizations, while Red Cross manages the Physically Handicapped centre at Galkacyo. It does not appear, on the basis of submitted data, that these centres are fully meeting SNE requirements within Puntland.

The government has written substantial policy in recent years, seeking to address the shortfalls in SNE provision. However, given the recentness of much of this work, and the limited resources available to the MoE&HE and partners, it is unclear how much impact will yet have been had.

Language Education

Language education remains an ongoing challenge in Puntland. There are some indications that the Ministry has sought to set English as the secondary medium of instruction, and provide some English-language classes at the upper primary level. However, it is unclear whether the resources exist to enable the delivery of such provision (see previous analyses of available learning materials). Limited data on what is actually being delivered in schools across the state further hampers an effective evaluation of this area. However, a recent study undertaken by a member of the ESC indicated that at secondary schools offering English-language education, provision is of a low standard; English teachers reportedly scored only 29% on an English-language examination. Given that primary provision draws lower fees, and teachers are reportedly paid less, it is likely that the standard of language education provision in primary schools is quite low.

Similarly, English-language assessments undertaken by AET for grade 7 students across the state, with the following results:

The overall results in English are not unexpected, as it is not the medium of education and especially as learners in grades 6 and 7 do not have any textbooks. The overall results show a very low performance with only 9.3% of the students scoring 50% or over on the test and 76% clearly having very few, if any, competences in English. (i.e. scoring less than 20 out of 60).

³² The percentage of NFE students with special needs is taken from the 2014/15 EMIS data rather than the 2015/16 EMIS data as information about the number of NFE students with special needs was not featured in the 2015/16 EMIS data given to Carfax.

Taken together, the above data would appear to indicate that language education standards remains relatively low.

Additional Analyses

Textbooks and Learning Materials

The general lack of textbooks within the classrooms visited poses a number of concerns relating to educational quality and the capacity of relevant organizations to deliver textbooks. A number of different factors are thought to be potentially impacting the availability of textbooks:

1. The MoE&HE reported it has not undertaken textbook distribution since 2011.
2. Textbooks may have been sent to schools by educational partners, and not distributed to children. This is potentially concerning for obvious reasons, as if resources allocated to children's education are not getting to those children, review of distribution procedures may be in order.
3. Children have been given textbooks, but are not using them. This is concerning from a pedagogical perspective, as having materials to practice with and refer to during class time is extremely important to good pedagogical practice. If this case is true, then review of the standard of instruction available at schools might be appropriate.

It may be the case that one or either of the above concerns is true; in either case, further study of this apparent lack of books in schools might be appropriate.

Observed Quality of Instruction

It must be noted here that no sector, aside from Higher Education, met the minimum standards of pedagogical practice. While some excellent teachers were identified by enumerators, overall standards do not appear up to the task of educating effectively.

After the above marking exercise, additional space was provided for enumerators to give unstructured supporting remarks. Those remarks were coded, and placed in the tables below:

Table 109 - Observed Quality of Instruction

	Frequency
Good lesson / teacher	26
Teacher is qualified / trained	23
Teacher needs training	23
Renovation required	17
Poor behaviour management	15
Teacher has lesson plan / is well prepared	13

No books for pupils	13
Teacher was friendly with students / had good engagement with pupils	12
Good subject knowledge	10
Too many students / multiple grades in classrooms	8
Teacher had no lesson plan / poor preparation	8
Teacher had poor engagement with pupils	7
Poor use of materials	3
Additional teaching and learning materials needed	3
Poor teaching	3

By and large, enumerators chose to most often indicate when an instructor did a good job; it may be the case that they wished to draw attention to good practice when so often confronted with challenges in standard of instruction. This was followed closely by comments on the level of training or qualification held by teachers.

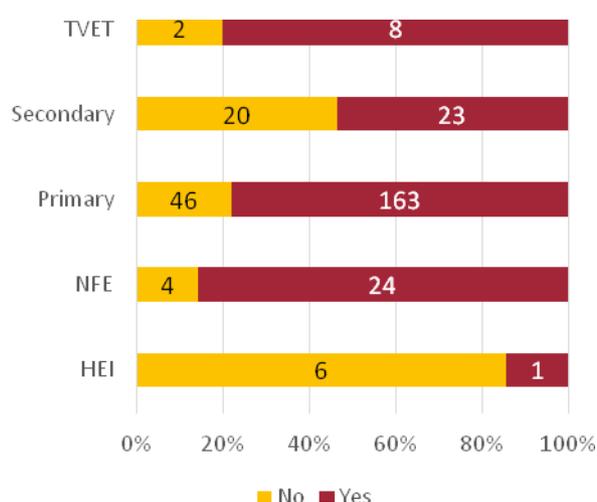
The next 3 most common responses indicated that the teacher needed further training, that substantial renovation of facilities was required in the classroom, or that the teacher had poor behaviour management skills. These areas may be instructive in seeking to identify focus for further educational provision in the state.

Observed Standard of Facilities

By and large, the standard of facilities appeared to be a challenge across visited institutions. However, concerns about standards of facilities are thought to be of secondary importance relative to the potentially poor standard of instruction offered in schools (see other analyses in this document for more detail) (Ko, Sammons, & Bakkum, 2013); as such, it is thought that any efforts to improve educational standards in the state should focus on these two areas first, given their higher potential impact on achievement and economic development (Lackney, 1994).

Enumerators were also asked to identify whether anything was missing from the classrooms, and whether anything within the classroom required improvement. These responses were subject to a coding exercise, with the following results:

Figure 106 - Do you immediately notice anything the classroom is missing?



These patterns of response broadly followed those in the evaluations of facilities, with NFE, Primary, and TVET faring poorly. Enumerators were also asked to describe what each classroom was lacking, with the following results:

Table 110 - Things missing

	Frequency
There are no books in the classroom	71
Poor standard of classroom	58
Learning materials and visual aids	37
Space is too small or too full of children	20
Lack of appropriate chairs or many chairs are broken	10
Desks are not present or many are broken	10
There are insufficient books in the classroom	9
Maps	9
Fans or the room is too hot	6
Multiple grades are in one class	3
The school has no administrative staff	3
Laboratory and related equipment	2
Lights	1
Notebooks	1
Projector	1
Rulers	1

Once again, a lack of textbooks was a common theme, followed closely by poor standards of facilities, a lack of teaching and learning materials, and inadequate space for children.

Where facilities were rated as substandard, enumerators were asked to identify the reasons for this evaluation. Their responses were subject to a coding exercise with the following results:

Table 111 - Things needing improvement

Renovation required or new buildings needed	71
Uncomfortably hot classrooms or a lack of fan	45
Learning materials and visual aids were missing	26
Appropriate chairs / or many desks are broken	18
Appropriate desks / or many chairs are broken	15
Poor standard of teaching	11
Overcrowding in classrooms	7
Roof was substandard or leaking in the rain	6
Classrooms were dirty	6
Books missing	3
Broken windows	2
Small blackboard	1
No windows	1
Broken computer	1
Electricity	1

Poor standards of facilities was followed closely by comments on heat within classrooms, and a lack of teaching and learning aids. Once again, concerns about standards of facilities are thought to be of secondary importance relative to the potentially poor standard of teaching identified (Ko, Sammons, & Bakkum, 2013)(see other analyses in this document for more detail); as such, it is thought that any efforts to improve educational standards in the state should focus on this first, given their higher potential impact on achievement and economic development.

Ministry of Education Management Capacity

Increasing Stability and Funding

As Puntland transitions from emergency-based to more sustainable models of educational provision, it is thought that social and economic policies and programs will be increasingly prioritized by decision-makers in the state. Though still both an immediate and present concern, given existing border and administrative disputes with neighbouring states and the continued insurgent threat posed by Al Shabaab, the years of conflict and instability in Somalia limited the government's flexibility to devote substantial resources away from the security sector. However, Puntland authorities have recently moved to emphasise socioeconomic development, evidenced by the increased budgetary allocation for the education sector; increasing from 3.5 percent to 7.14 percent in 2016.

While many positive steps toward improving capacity in the education sector have been identified, a number of challenges still remain. In keeping with requests by the MoE&HE, this analysis has been structured around the 'Puntland Capacity Development Plan' of 2013; relevant structure and findings have been drawn directly from that document, and amended where appropriate in light of new data collected by the ESA team.

Quality Assurance and Standards (QAS) Department

Quality Assurance and Standards Department has the remit to manage curriculum implementation, standards and quality assurance in primary and secondary schools nationally. QAS services are fairly decentralized to the regional and in some cases to the districts levels.

Table 112 - Quality Assurance and Standards (QAS) Department

Capacity gaps	Benchmark
<p>There is irregular quality assurance and standards monitoring services especially in rural areas. Less frequent curriculum implementation and school administration supervision and monitoring in remote and rural schools. It is unclear, on the basis of submitted data, what the specific percentage of visited schools nationally comprise.</p>	<p>a) 80% of schools supervised by QAS staff at central level, REO/DEOs use school monitoring guidelines and check lists developed;</p> <p>b) 80% of schools supervised by QAS staff at central level, REO/DEOs use school supervision and monitoring tools developed;</p>
<p>The department has developed quality assurance documents that still require translation and operationalization to ensure quality services are offered by the department. The documents included:</p> <p>a) Quality assurance and supervision manual</p> <p>b) Supervision and monitoring tools</p>	<p>c) 85% of QAS monitoring and supervision reports follow the standard format with common themes focusing on quality concerns.</p>

<p>were also developed</p> <p>c) QAS monitoring report format standardized</p> <p>Several completed samples of these were submitted to the ESA team; they appeared to be useful and broadly fit-for purpose. However, the ESA team were unable to establish the frequency with which these are deployed across the state; as such, their national impact cannot yet be established.</p>	
<p>It appears that some training for staff on use and deployment of relevant tools has been undertaken.</p>	<p>Biannual professional development for skills upgrading for QASOs at the MoE&HE central and a few REO/DEO QASOs. Quality assurance and standards monitoring, use of the newly developed monitoring tools, and reorientation on QAS services.</p>
<p>Staff Job-descriptions had just been developed and required roll-out in 2013; it appears these have been deployed as planned, though some need for revision and restructuring has been identified, and one still needs to be developed for the Head of School registration.</p>	<p>100% of all QAS staff have job-descriptions clarifying roles and responsibilities.</p>
<p>There is no standardized curriculum yet for NFE, ECD, &TVET centres, which means that each centre uses whatever curriculum is available to it. The use of varied curricular further complicates quality assurance and standards monitoring</p>	<p>Standardized curriculum for all centres.</p>
<p>The secondary Syllabus is not compatible with Curriculum Framework</p>	<p>Secondary syllabus reviewed in compliance with PL CFW.</p>
<p>All PL Institutions are not registered but some of them recognized. The department has developed registration documents. The documents included:</p> <ul style="list-style-type: none"> ❖ Application Form for schools, NFE centers, TVET centres and 	<p>All schools, centers and colleges registered in 2017.</p>

Colleges; ❖ Registration Guideline; ❖ Certificates for all; and ❖ Registration checklist.	
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Technical Vocational Education & Training (TVET), Teacher Training, and Programmes

The department is headed by the director, and each subunit has its own officer.

TVET Unit

Technical Vocational Education & Training (TVET) operates as a unit at the MoE&HE and is headed by the Director of programs. As of 2013, the director works with 2 officers doubling as TVET and Program officers. With 4 IBTVETs and 30 EBTVEs in Puntland, and only 2 officers being shared between the Programme Department and the TVET Unit, the unit is very human resource constrained. As a result, the TVET sector remains largely project-based, overseen and delivered by international partners, with limited MoE&HE input and oversight.

Teacher Training

This department is additionally responsible for training teachers; the primary institution through which teach training is delivered is GTEC in Garowe. However, the institution's maximum capacity is 200 teachers at any one time, with approximately 1/2 - 1/3 of those graduating annually. The rates of output are insufficient to keep up with rapidly-growing demand for teachers in the Primary and Secondary education sectors, not to mention NFE and ABE. As such, while there appears to have been substantial input and collaboration with GTEC to design and set relevant curricula, the capacity of this department to implement training regimes for the entire countries sector remains limited.

Programmes

The officer in Programmes takes the role of coordinating MoE&HE and relevant educational partners. The director of the department is also the ESC Coordinator which organises the monthly meeting and works closely with the partners; ESC Coordination falls under this department.

Vocational Qualifications Authority (VQA)

It was reported that Vocational Qualifications Authority (VQA) has not yet been established, though its establishment remains a priority of the MOE; the Vocational Qualification Framework (VQF) has been drafted with the assistance of the MOE's educational development partners, and awaiting approval at policy level. Several gaps highlighted below were pointed out by the Director of of the department

Table 113 - Technical Vocational Education & Training (TVET) and Vocational Qualifications Authority (VQA) Department

Capacity Gap	Benchmark
VQA is not yet established and VQF has not been approved. It is difficult to	a) Legal framework – develop the VQA Act to

<p>monitor quality and ensure standards conformity by the TVET centres. Without an approved VQF it is not possible to set minimum standards and to monitor quality and standards.</p>	<p>legalize its operation;</p> <ul style="list-style-type: none"> b) Approved VQF; c) 75% of TVET centres registered and accredited as necessary; d) Standardized curriculum developed and used at 75% of IBTVET centres; e) minimum standards for TVET developed, in close collaboration with the QAS Department; f) 75% TVET centres monitored, supervised for quality assurance of TVET activities.
<p>There still does not appear to be a legal framework - Vocational Qualifications Act - within which VQA can operate and carry out its mandate, roles and responsibilities even if it was established.</p>	<ul style="list-style-type: none"> a) Fully operational VQA (operationalization of VQA); b) Established VQA that operates and carries out its mandate, roles and responsibilities.
<p>It is still unclear if REO/DEOs are included in the supervision and monitoring of TVET activities; staff may still need to be equipped with skills to undertake relevant assessments. It is still unclear what percentage of staff have already received relevant training.</p>	<ul style="list-style-type: none"> ❖ 80% of REO/DEO trained on VQA, its mandate, roles and responsibilities.
<p>The available QASOs have no TVET background and so have no professional proficiency and technical expertise for monitoring and assuring quality and standards in TVET centres. TVET centres do not receive quality assurance and standards monitoring services from the MoE&HE.</p>	<ul style="list-style-type: none"> a) Develop minimum standards for TVET, monitoring, supervision and quality assurance of TVET activities in close collaboration with the QAS Department; b) Update QASOs on TVET professional proficiency and technical expertise for monitoring and assuring quality and standards in TVET centres.
<p>There are some standardized curricula yet for TVET centres for level 1 training. However it is unclear how widely observed these curricula are, with some indications that each centre uses various other curricula. The use of varied curricula further complicates quality assurance and standards monitoring.</p>	<ul style="list-style-type: none"> ❖ Standardized curriculum used at 75% of IBTVET centres.

The capacity of the ministry to set a market-oriented curriculum, given the limited resources, remains unclear.

Policy and Planning at the MOE

Policy planning and coordination are the direct responsibility of the Department of Policy, Planning (DPP) at the MoE&HE. Some of the key responsibilities of the DPP are educational data collection, policy formulation and articulation, coordination of educational services, and educational management information systems (EMIS) management.

Table 114 - Department of Policy and Planning (DPP)

Capacity Gap	Benchmarks
The planning function of the MoE&HE and EMIS are highly centralized, and still require functioning internet for real-time access. EMIS data is still collected through paper surveys. It is unclear how useful it has been to regional or district authorities.	Decentralize the policy planning, coordination and EMIS functions with linkages to the Headquarters/central Ministry to the at least 6 of the 8 regions .
There have been some skills development and training programmes over recent years; it is unclear whether these are bi-annual.	Biannual professional development for skills upgrading for practical transfer of the necessary skills and capacity strengthening at regional level.
As of 2013, MoE&HE DPP staff had inadequate skills in policy development, strategic planning and planning cycle management and implementation; budgeting and the budget cycle; education data collection, processing, reporting and dissemination; coordination. It is unclear to what degree this has improved.	Tailor-made capacity development programme for training and revamping the skills of DPP staff in the areas of policy development, strategic planning and planning cycle management and implementation; budgeting and the budget cycle; education data collection, processing, reporting and dissemination; coordination designed and implemented.
MoE&HE does not have many education policy experts and professional planners across many areas, relying heavily on external consultants and ESC partner expertise. Some departments do have Technical Advisers, but reliance on consultants remains heavy.	Collaborative arrangements made with the local universities to train in the development of professional education policy experts and planners, at post-graduate levels, a certain number of graduates for a certain number of years, in policy development and formulation, and policy planning; budgeting, etc.
The ESC, comprising key educational	Yearly or bi-yearly policy review fora

<p>partners and the MoE, meets somewhat regularly, and undertake joint reviews of activity against strategic plans and other policy documents. However, some indications are that review of key documents and policies documents happens only once every few years, as opposed to the targeted once per year.</p>	<p>conducted for progress reviews of the implementation of the various policy documents such as the Puntland Education Policy Paper (PEPP, 2015), Puntland Education Strategic Plan (PESSP, 2012-2016) and others key policy documents.</p>
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Education Management Information System (EMIS)

The Education Management Information System EMIS system was established in the DPPC under the support of ICDSEA Project. It is in charge of collecting, processing, producing and managing educational data, and creating a data base for policy decision making and policy planning purposes.

Table 115 - Education Management Information Systems

Capacity Gap	Benchmarks
<p>EMIS system not fully functional, when measured against corresponding benchmarks. Substantial functionality has been achieved, but not the full range required.</p>	<p>Enhanced EMIS functionality to include information analysis and utilized for planning.</p> <p>System developed to transfer data (attendance registers, admission records) from ground level to EMIS at the central Ministry of Education.</p>
<p>EMIS unit at the MoE&HE does not collect data from all the other MoE&HE departments and disseminate the information to stakeholders; some data is currently shared with NFE and TVET centres.</p>	<p>a) Expand EMIS capacity to link with and capture essential data from other departments such as NFE, TVET and DHE, TEU;</p> <p>b) Disseminate EMIS information to MoE&HE staff and key stakeholders including educational development partners.</p>
<p>EMIS staff have inadequate skills in management, processing and data analysis.</p>	<p>Training conducted for EMIS staff on Advanced Excel, SPSS, data processing and analysis.</p>

Additional Notes on EMIS

Ongoing data analysis indicates that there may be some educational providers in Puntland that operate outside the supervision of the MoE&HE. Interviews held with high-level stakeholders

have referenced the potential ongoing challenges faced by the MoE&HE in bringing all education providers under its system of governance.

The Education Management Information System (EMIS) has been utilized to compile data on all registered education providers in Puntland since 2012. Utilizing data to facilitate evidence-based planning and decision making at the Ministry level is critical to meeting Puntland’s education sector objectives presently, and in the coming years.

EMIS currently is being utilized to document data from the primary, secondary, NFE, Higher Education, and TVET sector. Enrolment rates are identified based on gender, and urban-rural splits, enabling evidence-supported programming that accommodates both socioeconomic and demographic considerations within Puntland.

The incorporation of additional data has the potential to improve EMIS impact. Selected recommendations comprise: enrolment of IDPs, children with special needs, attendance data, and minority groups. These would further strengthen planning to meet desired standards of education quality. Furthermore, data from priority sectors such as Early Childhood Education (ECE) is currently not being documented on the EMIS system.

In terms of existing capacity challenges, there currently exists a lag in the updating of data on the electronic database, with current turnaround times posing a potential challenge to educational planning at all school levels nationwide.

Furthermore, current EMIS systems contain little data on educational quality (e.g. learning outcomes, quality of instruction, etc.), focussing largely on the measurement of activity. Truly evidence-based evaluations and decision-making within the education sector require strong data on learning outcomes, as well as activity; as such, learning outcomes may come to comprise of the core focuses of capacity-building.

Human Resource Management at the MOE, REO/ DEO Level

The Department of Human Resource Management (HRM) is responsible for the management and professional development of the MoE&HE human resource from the central to the district level. The functions of the HRM Department are: facilitating MoE&HE staff recruitment; definition and development of job descriptions and human resource development and management policies; developing standardized staff performance evaluation tools for annual performance evaluation of MoE&HE staff; developing and maintaining staff establishment, transfer and separation records from the central ministry to the school level;

Table 116 - Department of Human Resource Management (HRM)

Capacity Gaps	Benchmarks
<p>HRM Department late 2014 introduced the a) human resource management manual; b) Performance Appraisal System (PAS) under the WWI Phase 1 Project. The documents and PAS system had not fully been used at the MoE&HE central and the REO/DEO levels, even</p>	<p>80% of senior MoE&HE staff at central and REO/DEO levels oriented/inducted on human resource management manual; and TOT Training for 3 HRM officers.</p>
	<p>80% of heads of department trained on performance evaluation processes.</p>

<p>though some departments were already using them at the MoE&HE central level. There is need to operationalize the PAS system and institutionalized the documents use at central and regional levels.</p> <p>It appears that none of the training benchmarks have yet been met, and the ministry has yet to develop an MoE&HE training policy and professional development plan.</p>	80% of staff at the MoE&HE central and the REO/DEO levels appraised by the Performance Appraisal System (PAS).
	HRM functions are decentralized to regional level and linked to central level.
	80% of MoE&HE staff at central and REO/DEO levels oriented on MoE&HE training policy, professional development plan.
<p>Lack of Human Resource (HR) and Human Resource Development (HRD) plan developed based on strategic priorities of the MoE&HE and human resource recruitment and deployment based on the plan. Very few if any of the benchmarks (on the right) laid out in 2013 have yet been met.</p>	MoE&HE recruitment and deployment plan developed.
	Ministerial Training Committee established and Professional Development Plan developed reflecting the key training areas for MoE&HE professionals in all departments and REO/DEO level.
	Retirement/Succession Plan developed and operational.

MoE&HE Capacity for Financial Management & Budgeting

Financial management at the MoE&HE is the responsibility of Finance and Administration Department. With the support provided under the ICDSEA Project the department has gone through a process of transformation and revamping. The capacity of the department is shown below.

Table 117 - Department of Financial Management and Budgeting

Capacity Gaps	Benchmarks
<p>Department computerized and Quick Books used as the accounting management software, and improved professional accounting management procedures;</p> <p>a) It is not linked with the REO/DEO</p>	Computerized accounting system linked to the REO/DEO level with linkages to the central accounting system.
	80% of professional accounting management procedures done in Quick Books software.

<p>accounting systems;</p> <p>b) Accounting systems at the REO/DEO levels are still manual and basic, focusing on petty cash payments, payment of wages (transferred from the MoE) to regional/district staff, and filing of documents;</p> <p>c) It is unclear how accurate the electronic system is, or how frequently it is updated. Some partners have reported challenges in this area;</p> <p>d) It is unclear how much training on financial management and planning has been undertaken at the ministry, though the EU Waxbarashadu Waa Iftiin (WWI) Mid-Term Evaluation indicated that some has been undertaken.</p>	<p>80% staff in Finance & Budgeting department and REO/DEOs trained in Quick Books software and proper accounting procedures.</p> <p>80% of senior officers from the departments of Finance and Administration, DPP and the relevant REO/DEO staff trained on the budget cycle and budget development, its process and linkages between the central ministry and the field level.</p>
<p>Financial and procurement procedures manual development in late 2012 and needed to be institutionalized; it is unclear whether this has since been achieved.</p>	<p>80% of staff understand and use the financial and procurement procedures manual at MoE&HE central level and REO level.</p> <p>All REOs and DEOs oriented on the financial and procurement procedures manual.</p> <p>Finance staff from the central MoE&HE train REO/DEO level on the interpretation and use of the newly developed financial policy and procedures manual.</p>
<p>MoE&HE Finance & Administration staff have new job-descriptions now appropriately assigned duties that match their level of education and training; it is unclear to what degree these have been deployed and observed across the finance department.</p>	<p>80% of Finance & Administration staff appropriately assigned duties based on their newly developed MoE&HE job-descriptions that match their level of education and training.</p> <p>80% of REO accountants have a TORs specifying their roles and expectations.</p>
<p>The budgeting structure at the MoE&HE was reported in 2013 to be integrated and participatory. Various departments participate by submitting their budget for incorporation into the overall MoE&HE budget – evidence of this has been requested from the finance team.</p>	<p>All the five departments of MoE&HE participate and their submit budget for incorporation into the overall MoE&HE budget.</p>

<p>Internal audit and external audit functions do not exist at the MoE&HE. This compromises accountability and transparency; Some international organizations attempted to undertake audits (e.g. World Bank and others), but encountered substantial difficulty in securing relevant and complete data.</p>	<p>Internal Audit function designed and implemented at the central MoE&HE and REO/DEO for transparency and accountability.</p>
<p>It is unclear whether MoE&HE central and REOs/DEOs have a ledger system where records of all assets are entered.</p>	<p>Ledger system put in place.</p>

Department of Higher Education (DHE) and Commission for Higher Education (CHE)

The Department of Higher Education (HE) appears to have grown substantially in capacity in recent years. The department is charged with the responsibility of developing and articulating policy for higher education; overseeing, coordinating and guiding the development and delivery of higher education in Puntland. The

The MoE&HE is in the process of establishing the Commission for Higher Education (CHE). When established and fully operational the key direct mandates of CHE will be quality assurance and standards in both public and private universities, registration and accreditation.

Table 118 - Department of Higher Education (DHE) and Commission for Higher Education (CHE)

Capacity Gap	Benchmarks
<p>DHE recently passed the relevant legal framework (the Higher Education Act) that defined its roles and responsibilities because the universities. Relevant bodies and responsibilities are currently being developed, given the recentness of the Act’s passage.</p>	<p>HE sub-sector policy developed and approved by the MoE&HE.</p> <p>Universities Act, Higher Education Act and CHE Act developed to provide a legal framework for the operations of DHE and CHE defining DHE roles and responsibilities established.</p> <p>Universities and Higher Education Acts developed and passed.</p>
<p>There do not appear to be any centralized standards HEIs must meet. The Commission for Higher Education (CHE) is still growing in capacity, and will likely set relevant standards in the coming years.</p>	<p>Institutions of higher learning / universities standard measurement and quality control standards developed.</p> <p>Develop minimum standards for a set of higher learning disciplines to facilitate quality assurance, monitoring and standards control</p>

	by CHE.
	80% of University registered and accredited according to DHE set standards.
	DHE data captured in EMIS.
As part of the capacity building program joint DHE & CHE educational tours are done to countries in the East African region and the Horn, with fully developed DHEs and CHEs.	Joint DHE & CHE educational tours to countries in the East African region and the Horn, with fully developed DHEs and CHEs for capacity building.

Examinations Department

The examinations unit sets official exams for the Primary and Secondary national certifications. In 2015, the unit successfully designed, administered, and marked final exams for all primary and secondary school leavers. According to the 2015 examinations report, “A total number of 10,052 candidates were registered for 2015 examinations provided to 7,255 for grade eight and 2,821 candidates for form four. The exam was conducted at a total of 74 centers with a human resource of 97 supervisors and 505 exam invigilators. To ensure an environment of safety and peace, there were more than 250 security personnel engaged across all Puntland schools and this created confidence in all those involved in the exam process.”

While the capacity to execute examinations appears to be strong, some questions have been raised as to the validity of examinations; c. 30% of grade 7 pupils in a recent national study were found to be functionally illiterate and/or innumerate. These findings may indicate a need to improve the capacity of the Examinations and Productions Unit to design effective examination questions, ensuring they are accurately marked by markers in the future.

Coordination with Education Partners

The Education Sector Committee (ESC) was established to allow for effective coordination between the MoE&HE and the major international and local NGOs operating in Puntland. The Committee sets annual action plans, and undertakes joint assessments of that activity and its impact at the end of the year. Action plans are intended to allow for the effective coordination of activity, minimising duplication of effort across the education sector.

Often, ESC targets were overarching, with an indicative example comprising: ‘2,000 primary school teachers will be trained’ or ‘250 new primary school campuses will be built’, with multiple organisations assigned responsibility for each. Such broad areas of focus and overlapping allocations of responsibility may have led to potential overlaps and conflicts. Additionally, targets appear to be largely output focussed (e.g. beneficiary counts, number of schools built, etc.), rather than outcome focused (e.g. ‘performance on EGRA assessments will improve by 5% by the end of the planning period). Several studies have pointed to the potential challenges posed by such output-focussed target setting (SCI, 2014), indicating a potential area for refocus moving ahead.

The ESC, and the MoE&HE as a component of it, appear to have had some success in coordinating activity, but there still appear to be challenges. In many cases, it appeared that ESC

partners had limited knowledge of what other actors were doing within the Puntland education space, and duplication of effort and input was still widely reported by high level stakeholders

Teacher Attrition

Funding for teacher salaries in Puntland comes from a variety of sources; partner organizations, the communities in which they work, as well as the MoE&HE maintains a database on teacher incentives at all subsectors of the education system, and, whilst the extent of this data is as of yet unknown, the MoE&HE has made a commitment to provide this data to the consultant for further analysis. The relevant Department further has committed to providing data on the rates of attrition amongst teaching staff at all subsectors. Once obtained, and upon further analysis of this data, efforts, if any, to curtail the teacher turnover may be identified.

On the basis of data submitted, though, it appears that there are some concerns related to MoE&HE's capacity to thoroughly assess the particular reasons for the high rates of attrition amongst educators in Puntland.

Gender Unit

The Gender Unit at the MoE&HE is a central driver of many female-focussed policies and programs in the education sector; advocating for equality of opportunity, and raising the enrolment rate and educational level of females in Puntland.

The public awareness campaigns seeking to shape views towards acceptance of and support for the education of females in Puntland appear to have had some impact. Whilst gross female enrolment rates have not yet reached intended targets, the rate at which females are enrolling in schools, particularly at the primary and secondary levels, has kept pace with their male counterparts, signalling that girls are not being left behind.

Turning its attention to the Higher Education sector, as well as TVET, the Gender Unit and the MoE&HE more broadly will look to further add to the achievements made in gross female enrolment rate at these levels. This will likely necessitate an expansion of capacity and further data that gives insight into the staff planning of the Gender Unit has been requested to this end.

Stakeholder Feedback on Ministry Activity

Interviews conducted with various stakeholders in the education sector sought to gain insight into the perceived role of the MoE&HE and its key responsibilities. The responses were consequently coded and are presented below:

Table 119 – High-Level Stakeholder Feedback on Ministry Activity

	Frequency
<i>n</i>	30
Guiding the education sector and creating policy	15
Monitoring educational quality / raising standards (M&E included)	8

Curriculum and syllabus	4
Setting examinations and certifications	4
Provision of training	2
Provision and distribution of resources	2
Liaising with donors	2
Education delivery	1
Poor capacity	1
Registration and accreditation of educational institutions	- 34

The high-level stakeholders most-frequently indicated that the main role of the MoE&HE was to influence the direction of education sector planning through policy and programme development. Given the existence of various sub-sector policy documents, it seems that MoE&HE does have capacity to internally develop policies guiding the provision of education in Puntland; however, it is yet unclear the degree to which these policies ‘filter down’ to lower levels of the education sector.

Monitoring educational quality was another key responsibility of the MoE&HE identified by respondents, and, as mentioned above, there does exist capacity to oversee monitoring and evaluation activities during school visits. The evaluation metric is currently in the process of being expanded, according to the Director of Quality Assurance and Standards, but given the data currently submitted to the Consultants, it is unclear to what extent the MoE&HE has the capacity to carry out these evaluations on a consistent and thorough basis across all sub-sectors.

Overseeing curriculum, as well as managing the development and delivery of teaching and learning materials was identified as a key role of the MoE&HE. In this regard, it appears that there exist some capacity challenges encumbering the MoE&HE in delivering upon these responsibilities. Data analysis revealed the challenges faced by educators in a lack of textbooks, particularly at the primary and secondary school levels, as well as limited availability of tools to develop lesson plans.

Table 120 - School Leaders and Teachers Feedback on Ministry Activity

	Frequency
<i>n</i>	72
Curriculum and syllabus	24
Guiding the education sector and creating policy	18

³⁴ This area of responsibility was submitted by the MoE&HE

Provision of textbooks	18
Monitoring educational quality / raising standards	14
Payment of salaries and teacher incentives	14
Setting examinations and certifications	11
Provision of training	10
School construction	3
Provision and distribution of resources	2
Liaising with donors	1
Education delivery	1
Certification and registration of institutions	1

School leaders and teachers overwhelmingly saw curriculum development as a major responsibility of the MoE&HE. The aforementioned challenges identified data collection in the field would indicate that there exist challenges in terms of the capacity available within the MoE&HE to oversee curriculum development to the degree expected.

There exist similar capacity challenges with regards to the provision of textbooks, identified as a key role of the MoE&HE by 18 school leaders and teachers. Research conducted in the study shows that textbook availability is a particularly pressing challenge at the NFE, Primary, and Secondary School levels, with 43 percent, 53 percent, and 74 percent of classrooms respectively found to not have textbooks, and 80%-90% of teachers surveyed indicating they do not use textbooks in their classrooms.

The high rates of attrition amongst teachers may be at least partially attributable to the resource challenges faced by the MoE&HE. Given that the MoE&HE is partially responsible for paying the wages of educators, it seems that there exist some capacity challenges in this regard.

Of all respondents, 11 teachers and leaders believed that the setting of examinations and certifications was a key responsibility of the MoE&HE. In this regard, it appears that there exists substantial capacity to carry out these duties effectively. The Puntland Examinations Board is seen as a relatively bright spot within the education sector and has been implementing policy, examinations, certifications and assessments reasonably well; some – relatively easily resolvable questions relating to international alignment of examinations have been realised, but it is not thought that these comprise substantial challenges. The data currently made available to the consultants does not provide insight into the degree of autonomy held by the Examinations Board.

Training of teachers, both pre-service and in-service, is carried out by both the government as well as various education partners in Puntland. Training programmes run by the MoE&HE are largely conducted at the government-run GTEC teacher training institute. A total of 10 respondents viewed training as one of the major roles held by the MoE&HE. Documents submitted to the Consultants indicate that at the primary and secondary level, 73 percent and 39 percent of teachers remain untrained respectively within the primary and secondary sectors. Given these figures, it seems that some challenges exist with regards to the ability and resource capacity of the

MoE&HE to ensure an adequate number of teachers are suitably trained to deliver high quality instruction to students.

Compliance and Transparency

Issues of compliance and transparency were explored by the Consultants in an attempt to determine whether these issues impacted the education sector in Puntland across the various levels of government, educational institutions, and at the community level.

All interviewed stakeholders were asked a series of basic questions seeking to determine the extent to which corruption was perceived to be an issue within the education sector and to clarify what form this corruption takes. Given the sensitive nature of the subject matter, it should be noted that apprehension on the part of respondents to speak on potentially taboo topics may have affected their responses.

Figure 107 - Are you aware of any corruption issues impacting on the education sector?

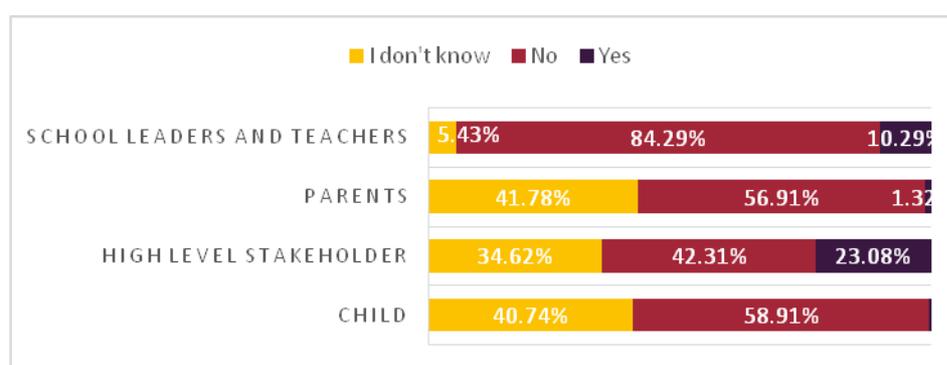
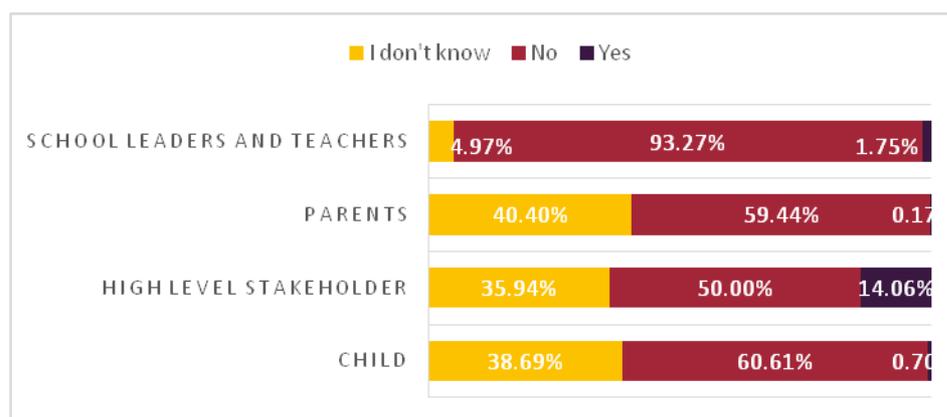


Figure 108 - Have you personally experienced any corruption issues impacting on the education sector?



Reported rates of corruption was very low among most stakeholders, with the exception of high-level informants: 23% indicated they were aware of corruption issues impacting the sector, while 14% indicated they personally experienced it. Low affirmations among other stakeholder groups may result from the enumerators' status as employees of the MOE; it is unlikely informants would want to discuss such matters directly to representatives of an organisation with which they had concerns.

Respondents were then asked for supporting qualitative responses; their answers were subject to a coding exercise and are displayed below:

Table 121 - Respondent Answers on Forms of Corruption

	Frequency
<i>n</i>	37
Government distributes resources unequally (urban-rural)	9
Mismanagement of resources	6
Bribes to gain qualifications and educational advancement	5
This is part of life in Puntland	3
Limited institutional capacity to control this	3
It may exist in other areas of the education sector, but I have not seen it personally	2
Schools hold back children intentionally to continue generating school fees	1
Teachers assigned for training don't receive it; it goes to others	1
Ghost teachers added to staffing lists	1

Particularly among high-level stakeholders, there was wide-ranging awareness of challenges stemming from corruption, though in many cases the definition of ‘corruption’ also included mismanagement of funds and resources, and institutional inequities (esp. relating to the rural-urban divide) and not necessarily collection of bribes and/or facilitation payments. Nonetheless, these findings support earlier concerns raised relating to strong management and administration of the sector.

Figure 109 - Are you aware of nepotism impacting on the education sector?

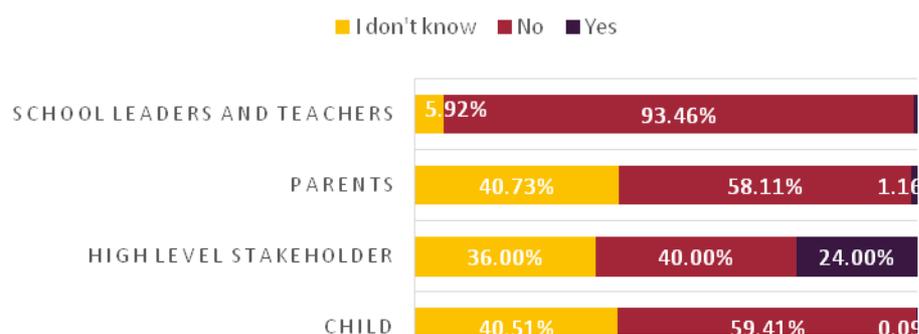
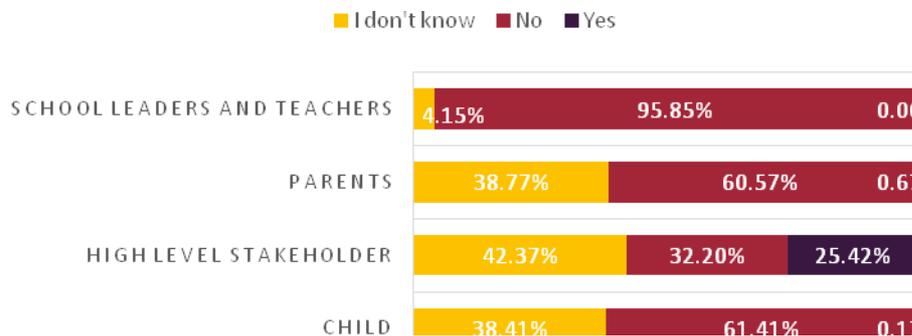


Figure 110 - Have you personally experienced nepotism impacting on the education sector?



Once again, most stakeholder groups indicated low awareness of nepotistic practice in the sector, but high level informants once again gave higher rates of affirmative response: 24%-25% indicated they were aware of or had personally experienced nepotism in the sector. Low affirmations among other stakeholder groups may result from the enumerators' status as employees of the MOE; it is unlikely informants would want to discuss such matters directly to representatives of an organisation with which they had concerns.

Those indicating that they were aware of or had personally experienced nepotism were asked to provide supporting qualitative responses. Those responses were subject to a coding exercise:

Table 122 - Respondent Answers on Forms of Nepotism

	Frequency
<i>n</i>	30
This is common / it is normal in Puntland	9
It is uncommon, but it does happen in the sector	6
This is common for high-level roles	4
Teachers and school administrators are hired / promoted based on nepotism	4
Some children are discriminated against and cannot attend schools	4
It has gotten a lot better	1
Some schools get more money than others, and it is not fair	1

The most common responses related to it being normal in Puntland as a whole, and by extension would be impacting on the education sector. Several stakeholders indicated that high level roles at some organisations and at the ministry were allocated on the basis of favouritism or nepotistic practice; in some cases frustration was expressed with specific cases of nepotism resulted in less-than-qualified people being hired for important roles. While these stakeholders do not comprise

the majority, the responses were similar and frequent enough that they may warrant further attention in policy and capacity development.

These findings support earlier commentary and analysis which pointed to potential capacity challenges in management and administration of the sector; as such, further attention during the ESSP phase of the project may be appropriate.

Themes and Conclusions

In the preceding analyses, a variety of themes directly related to Puntland's education landscape have been explored, covering issues that have impact on each individual subsector. Having gradually continued its development trajectory, Puntland has already made accomplishments in meeting several of the targets laid out in previous ESSP and strategic documents.

Accomplishments

- ❖ Puntland has successfully increased in the national budgetary allocation for the education sector from 2% five years ago to 7% in 2016.
- ❖ Puntland appears to have successfully enhanced utilization and documentation of data in EMIS, which now includes TVET, Higher Education and NFE subsector information;
- ❖ It appears that EMIS data is being used to inform decision making at the ministry and ESC level;
- ❖ Incorporation of Integrated Quranic schools into government oversight and administrative mechanisms has been successfully achieved;
- ❖ Puntland National Exams Board (PNEB) appears to be competently setting, marking and, qualifying the exams that are administered to students, though substantial development is required to fulfil its remit in PSS;
- ❖ The Gender Unit's efforts to raise awareness of female right to education appear to have had a relative degree of success.
- ❖ Increased Enrolment:
 - Primary enrolment increased by c. 37.6% since 2011/12 school year
 - Primary 2015/16 GER 57.9% (increasing 46.8% in 2012/213)
 - HEI annual enrolment growth rate of 52.7% has surpassed the planned 5% growth as indicated in original ESSP
- ❖ Urban-rural enrolment disparity at primary school level reached 14% in 2012 (achieving original ESSP target of being less than 20%).
- ❖ Steps to alleviate hunger in schools have been taken. The MoE, with the support of WFP, developed a plan to feed c. 20% of the 385,000 children identified to be vulnerable to hunger between 2015-2018.
- ❖ Higher Education Act and Commission for Higher Education has been established, beginning to carry out duties related to accreditation, quality assurance and financial scrutiny of HEI institutions.
- ❖ Within academic assessments undertaken for this ESA, there did not appear to be a substantial and systemic gap in academic performance between boys and girls.

Challenges

Demographic

- ❖ Population growth (whether by migration or other means) is placing additional strain on educational resources;
- ❖ Large families pose challenges to sending children to school, with some families forced to choose which child to send to school;
- ❖ Poverty remains a substantial challenge for most families, mentioned as the single-most important barrier to sending children to school;
- ❖ Minority groups may be marginalised, but limited data on these exists. Additional and more detailed demographic data will be required to address gaps.

Humanitarian

- ❖ IDPs may be seeking refuge in the relative stability and prosperity of Puntland, placing additional strain on educational resources. IDPs appear to have limited access to educational provision outside of Primary and NFE;
- ❖ Internal migration (due to security, environmental, drought, or economic factors, particularly to urban areas, is driving pressure on limited educational resources;
- ❖ Conflict and violence continue to impact on the education sector, whether in closing down schools, or forcing migration and displacement of people.

Socioeconomic

- ❖ High rates of unemployment and poverty place limits on the ability of families to pay high school fees;
- ❖ High school fees (c. 30% of est. per capita income) limits the ability of families to send all children to school in traditionally large Somali families;
- ❖ When forced to choose, boys may be chosen over girls, driving enrolment disparities;
- ❖ School fee payments largely support teacher salaries, so limited ability of families to pay fees will in turn negatively impact teacher retention rates, a detriment to both educational provision and quality;
- ❖ Child labour appears to be preventing children from attending school. This is particularly the case in IDP communities.

Political

- ❖ Minority groups may face obstacles in assuming decision-making and participatory roles in the education sector and are also limited in terms of access to some schools. It must be noted that this such practice is contrary to MoE&HE policy, and as such, are not thought to be problematic by the MoE&HE;
- ❖ Disputes with neighbouring states may be causing challenges in administration and direct lines of accountability within the education sector. Families may be forced to flee armed conflict,

and schools can be unsure by which government they are administered. In either case, some impact on educational provision can be anticipated.

Access

- ❖ In the case of pastoralists, despite limited data collected on enrolment figures, some reports place participation rates between 5 and 15 percent of their total population. It seems that limited steps or provision seeking to address these challenges have been taken in recent years;
- ❖ Coastal communities appear to be a relatively underserved segment of Puntland's population; it is unclear what steps are being taken to resolve this challenge;
- ❖ IDPs continue to have limited access to education in some cases. Some stakeholders indicated that IDPs cannot attend normal schools, forced instead to either work or attend IDP-specific institutions;
- ❖ Special Needs Education appears to be a largely underserved segment of the sector, with limited or no systematic provision identified within the sector;
- ❖ There continues to exist a Male-Female enrolment gap (Male primary GER 63.8%; female GER 51.8%), though, once in school, girls appear to be keeping up academically with their male counterparts.

Quality

- ❖ Consistent delays in payment of teacher salaries have been reported, and teacher salaries in many cases remain low. The NFE sector in particular did not pay its teachers well, relying heavily on volunteer teachers;
- ❖ Teachers within the system remain largely untrained at every level of the education system, and low levels of instructional quality was observed as part of the ESA field research;
- ❖ Teachers performed poorly on basic Somali-language examinations, indicating challenges in the standard of subject knowledge among teachers; it appears that most teachers do not meet Puntland's minimum subject knowledge standards to be teachers;
- ❖ TVET appears to be largely unlinked to the employment sector, with relatively low levels of accountability among providers. It is unclear the degree to which such programmes promote employment;
- ❖ There was limited availability of teaching and learning materials, with most-commonly-cited concerns including:
 - Books
 - Blackboard
 - Lesson plans and mark sheets
- ❖ Low quality condition of facilities
 - Dilapidated buildings and furniture

- Unhealthy environment - no cooling systems or windows
- Limited working sanitary facilities
- Limited provision of library facilities
- ❖ English-language education is poor
 - Limited availability of English-language learning materials
 - English-language teachers scored only 29% on subject knowledge tests, with few primary students demonstrating any English-language competence in assessments
- ❖ Students generally lagged behind international standards by 2-3 years, with some regions performing particularly poorly (Hayland, Sanaag, and Kakaar);
- ❖ Challenges were particularly prevalent in numeracy examinations, with high-level mathematics tasks proving particularly challenging for many pupils;
- ❖ NFE may be graduating students to higher grade levels without first ensuring minimum achievement prior to graduation;
- ❖ Disparities in rural-urban academic performance appear to become particularly prevalent from upper primary onward;
- ❖ Exams and qualifications standards may be too easy from primary school leavers, and do not appear to be internationally benchmarked.

MoE&HE Capacity

- ❖ Financial management may be a potential challenge, as there have been some difficulties in providing granular figures documenting total revenue and expenditure across the sector; overarching figures have been provided, though data remains insufficient to undertake detailed analyses.;
- ❖ 14% of schools identified via stakeholder may be operating outside the view of the MoE&HE, indicating a potential need to undertake additional registration activities;
- ❖ There appears to be a limited ability to coordinate and manage funding from the diverse range of resources allocated to the education sector in Puntland, particularly across the various NGOs and international organisations operating in the state. Duplication of effort across the sector appears to be a substantial challenge;
- ❖ Substantial delays have been reported in updating EMIS which hinders timely evidence-based planning and decision making;
- ❖ EMIS data could be expanded to include a wider range of indicators and data relating to demographics (e.g. IDP, minority groups), and pupil achievement data;
- ❖ Ministry and ESC targets appear to be largely output-oriented (e.g. enrolment figures, and schools built), with limited focus on objective measures of quality (e.g. pupil achievement).
- ❖ Some concerns relating to nepotism and mismanagement of resources has been expressed by high-level stakeholders; this may provide a useful area of further focus in capacity development activities.

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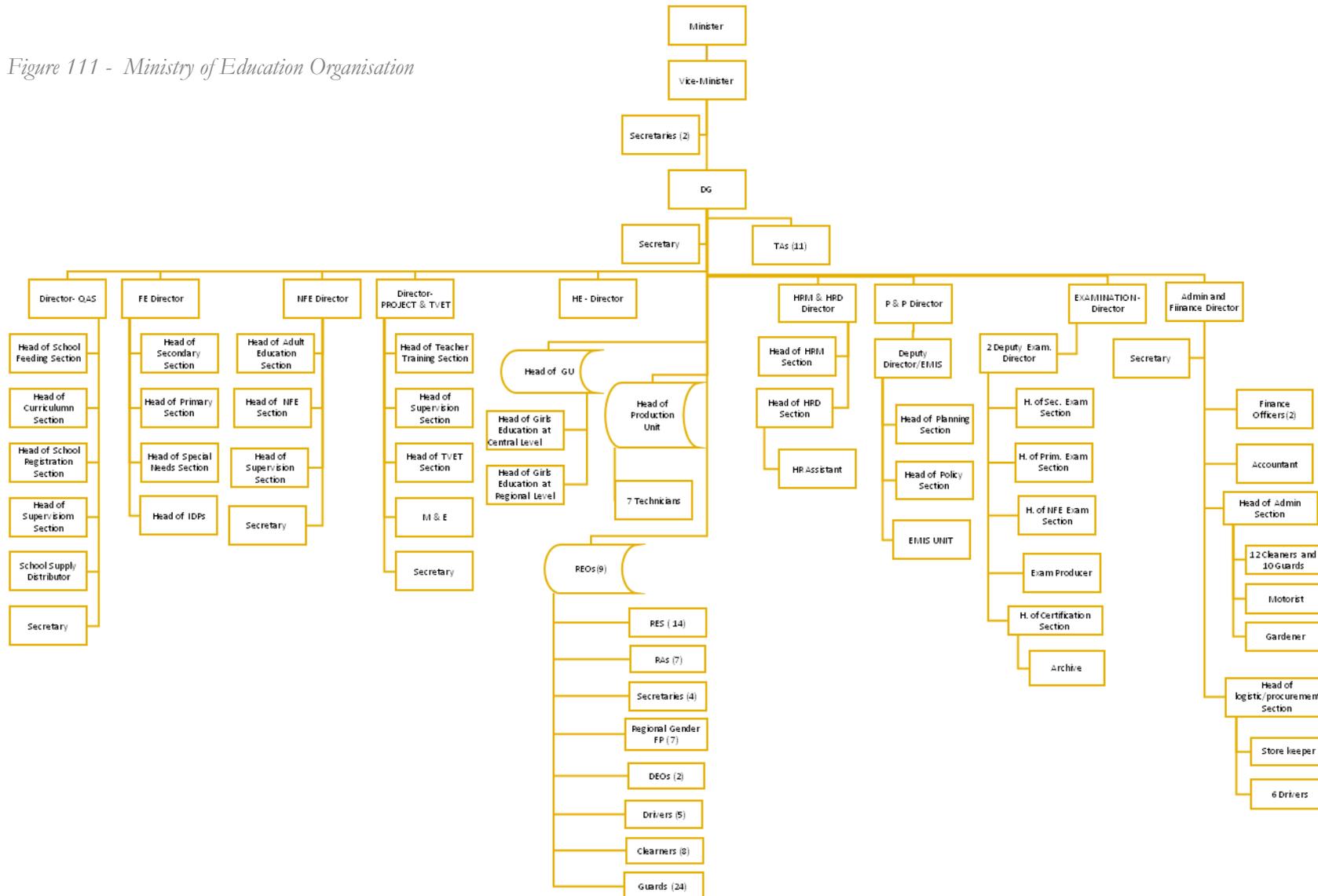
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Appendix 1 – Ministry of Education Organisation

Figure 111 - Ministry of Education Organisation



Appendix 2 – List of Ministry and Partner Supplied Internal and Policy Documents Informing this Study

Table 123 - List of Ministry and Partner Supplied Internal and Policy Documents Informing this Study

AUTHOR	TITLE	YEAR
Abdisalam Ali Farah and Abdulkadir Sh. Mohamoud	National Gender Strategy	2015
Africa Educational Trust	Report On Measuring Learning Achievements In Grade Seven (MLA 7) Puntland	2013
Africa Educational Trust	Somali Pastoralist Education And Training 2008-11	2013
Ali Hussein Abdi and Rod Hicks	Somali Pastoralist Education And Training 2008-11	2013
CARE International Somalia, Ministry of Education and Waxbarashadu Waa Iftiin (Education is Light) Project	Presentation On The Survey Of Special Needs And Marginalized Children Assessment In Waxbarashadu Waa Iftiin Supported Primary And Secondary Schools In Puntland, Somalia	2015
Central Scientific Supplies	Invoice	2012
Gabby Books (K) LTD	Invoice	2012
Grace Syong'oh , Joseph Mungai and Victor Okeyo	Waxbarashadu Waa Iftiin (Education Is Light) Phase II Project Puntland	2016
Grasim Suppliers	Invoice Act Somaliland	2011
Grasim Suppliers	Re: Invoice For The Supplied Water And Gas Fittings	2011
MINISTRY OF EDUCATION AND HIGHER EDUCATION PUNTLAND STATE OF SOMALIA	Gender Unit Work Plan For June To December 2015	2015
Ministry of Education Puntland	2nd Joint Review Of The Education Sector	2015
Ministry of Education Puntland	Basic Requirement And Minimum Standards For Education Institution In Puntland	2014
Ministry of Education Puntland	Capacity Assessment And On-Job Training Of Regional Education Supervisors	2011
Ministry of Education Puntland	Consultation Workshop On Recurrent Cost Support To The Education Sector	2016

Ministry of Education Puntland	Delivery Strategy For Pastoralist Education In Puntland	2016
Ministry of Education Puntland	Education Action Plan March 2014-February 2015	2014
Ministry of Education Puntland	Education Action Plan March 2015-February 2016	2014
Ministry of Education Puntland	Education Sector Strategic Plan 2012-2016	2011
Ministry of Education Puntland	Higher Education Sub-Sector Policy For Puntland Government Of Somalia	2011
Ministry of Education Puntland	MoE&HE Budgets For 2012 Up To 2016 Final	2011
Ministry of Education Puntland	National Curriculum Development Framework	2015
Ministry of Education Puntland	Non-Formal Education Policy	2014
Ministry of Education Puntland	Pastoralist Education Policy	2015
Ministry of Education Puntland	Puntland Capacity Development Plan	2014
Ministry of Education Puntland	Puntland Education Policy Paper (PEPP)	2012
Ministry of Education Puntland	Puntland Education Sector Strategic Plan, 2012- 2016	2011
Ministry of Education Puntland	Puntland Examination Report For Primary And Secondary	2012
Ministry of Education Puntland	Puntland Joint Review Of The Education Sector (JRES) Synthesis Report 2015	2015
Ministry of Education Puntland	Puntland National Examination Report	2014
Ministry of Education Puntland	Puntland State Of Somalia Education Statistics Yearbook 2013/2014	2013
Ministry of Education Puntland	Puntland Teacher Education Policy	2012
Ministry of Education Puntland	Quality Assurance Sub Sector Policy Ministry Of Education Puntland	2014
Ministry of Education Puntland	Strategy For Puntland Tvet Institutions	2015
Ministry of Education Puntland	Strategy For Puntland Tvet Institutions	2015
Ministry of Education Puntland	Teaching And Learning Materials (Tlm) Guideline	2015
Ministry of Education Puntland	Technical And Vocational Education And Training Policy	2014
Puntland Development Research Centre (PDRC)	Aide Mémoire Joint Review Of The Education Sector (JRES) 2015	2015
Puntland Development Research	Aide-Mémoire From Joint Review Of The	2014

Centre (PDRC)	Education Sector (JRES) 2013	
Puntland Government Of Somalia	Higher Education Institutions Act	2015
Puntland Government Of Somalia	Report On Monitoring Learning Achievements (MLA) In Grade 4 In Puntland And Somaliland.	2012
Puntland Government Of Somalia	The Education Act	2012
Puntland National Examinations Board	Examinations Report For Primary And Secondary For The Academic Year 2014/2015	2015
Save the Children International	NORAD Framework Project Baseline Assessment On Literacy Final Report Summary	2016
Save the Children International	The Puntland Local Labour Market And Skill Survey - 2013	2013
The European Union	Mid-Term Review Of Education Sector Development Programme Ii, Somalia	2015
UNESCO	Guidelines For Education Sector Plan Appraisal	2015
UNESCO	Guidelines For Education Sector Plan Preparation	2015
UNESCO, UNICEF, the World Bank, the Global Partnership for Education.	Education Sector Analysis Methodological Guidelines, Volume 1	2014
UNESCO, UNICEF, the World Bank, the Global Partnership for Education.	Education Sector Analysis Methodological Guidelines, Volume 2	2014
USAID, PUNTLAND GOVERNMENT OF SOMALIA , Mercy Corps	A Report Of The Tlm Situation In Selected Secondary Schools In Puntland	2015

Appendix 3 – Full Data Tables

Primary Education

Table 124 – PE Male-Female Access and Equity

	% of total students broken down by gender							
	EMIS 2013		EMIS 2015		2016 Lesson Observations		2016 School Data Form	
	M	F	M	F	M	F	M	F
Primary	56%	44%	56%	44%	56%	44%	56%	44%
Ayn	61%	39%	57%	43%	61%	39%	52%	48%
Bari	58%	42%	57%	43%	55%	45%	54%	46%
Gardafuu	57%	43%	63%	37%				
Hayland	57%	43%	56%	44%	38%	62%	51%	49%
Karkaar	57%	43%	54%	46%	54%	46%	54%	46%
Mudug	55%	45%	55%	45%	58%	42%	60%	40%
Nugaal	53%	47%	56%	44%	56%	44%	55%	45%
Sanag	56%	44%	56%	44%	57%	43%	59%	41%
Sool	56%	44%	57%	43%	52%	48%	54%	46%

Table 125 - Analyses of EMIS Data for Each Primary Subsector

		% of total students broken down by gender			
		2013		2015	
		Male	Female	Male	Female
Alternative Basic Education	Bari	52%	48%	50%	50%
	Hayland	48%	52%	38%	62%
	Karkar	57%	43%	51%	49%
	Mudug	57%	43%	53%	47%
	Nugal	36%	64%	52%	48%
	Sanag	53%	47%	59%	41%
Alternative Basic Education Total		45%	55%	52%	48%

Integrated Qur’anic School	Ayn	47%	53%		
	Bari	58%	42%	57%	43%
	Gardafuu	60%	40%		
	Hayland	58%	42%	58%	42%
	Karkar	53%	47%	53%	47%
	Mudug	46%	54%	50%	50%
	Nugal	55%	45%	51%	49%
	Sanag	53%	47%	55%	45%
	Sool			75%	25%
Integrated Qur’anic School Total		55%	45%	55%	45%
Primary School	Ayn	62%	38%	57%	43%
	Bari	58%	42%	57%	43%
	Gardafuu	57%	43%	63%	37%
	Hayland	57%	43%	57%	43%
	Karkar	57%	43%	55%	45%
	Mudug	56%	44%	55%	45%
	Nugal	54%	46%	56%	44%
	Sanag	56%	44%	57%	43%
	Sool	56%	44%	57%	43%
Primary School Total		56%	44%	57%	43%

Table 126 – PE Observed Quality of Instruction

	Primary Total	Ayn	Bari	Hayland	Karkaar	Mudug	Nugaal	Sanag	Sool
Teacher has good subject knowledge	2.9	2.2	3.4	3.3	3.2	2.8	2.9	3	2.3
Lesson goals are clear	2.7	2.1	3.2	4	2.9	2.6	2.5	2.8	2.2
Expectations of learners are clear	2.6	2.1	3.1	4	3	2.6	2.3	2.4	1.9
Good use of resources and materials	2.4	2.3	3	3.7	2.1	2.6	2.1	2.7	2.1
Teacher knows their students and their needs	2.6	2.1	3.1	3.3	3	2.6	2.4	2.7	2
Teacher adapts to meet individual pupil	2.5	2.2	3	3	2.7	2.6	2.2	2.4	2

needs									
'Learning to learn' strategies are taught and practiced in class	2.3	1.9	2.8	3	2.9	2.5	1.2	2.5	1.9
Teacher gives individual students guidance and feedback	2.5	1.9	3.1	3.7	2.8	2.5	2.3	2.6	1.9
Cross-curricular learning is achieved	2.3	2.1	2.9	4	2.4	2.6	1.3	2.6	2.1
Teacher accepts responsibility for learner outcomes:	2.5	2.1	3.1	4	2.9	2.6	2	2.6	2.1
Instructor manages classroom behaviour well	2.8	2.1	3.2	3.3	3.7	2.7	2.2	2.7	2.2
Summary Judgment	2.5	2.1	3	3.6	2.8	2.6	2	2.6	2

Table 127 – PE Teacher Subject Knowledge

	%
Primary	66%
Ayn	62%
Bari	58%
Mudug	68%
Nugal	74%
Sanag	53%
Sool	69%

Table 128 - PE Pupil-Teacher Ratios

	Observed PTR	2013 EMIS ³⁵	2015 EMIS
Primary	31:1	28:1	33:1
Ayn	29:1	26:1	24:1
Bari	31:1	28:1	31:1
Gardafuu	N/A	29:1	38:1

³⁵ Within subsector-specific analyses, all figures are based on 'Estimate 0' figures given within EMIS data. PTR figures are calculated by dividing total number of pupils by number of teachers.

Hayland	16:1	29:1	33:1
Karkaar	36:1	26:1	31:1
Mudug	29:1	31:1	33:1
Nugaal	32:1	28:1	41:1
Sanag	26:1	27:1	28:1
Sool	29:1	22:1	34:1

Table 129 – PE Pupil Performance on Letter Identification

	Grade							
	1	2	3	4	5	6	7	8
Primary	48	56	69	76	87	99	104	103
Ayn		29	23	26				
Bari	96	99	85	79	90	82	85	87
Hayland	1	57	65	92			86	91
Karkar	57	74	78	80	90	108	107	107
Mudug	36	60	74	96	105	109	114	115
Nugal	74	65	83	83	74	85	97	99
Sanag	20	54	66	64	88	87	97	100
Sool		34	26	53	41			

Table 130 –PE Pupil Performance on Sounding Out Unfamiliar Words

	1	2	3	4	5	6	7	8
Primary	16	37	50	49	61	66	69	74
Bari	3	58	44	43	46	44	44	43
Hayland		26	37	33			40	50
Karkar	15	37	45	44	61	60	63	73
Mudug	20	36	49	63	66	73	79	83
Nugal		64	71	67	63	80	96	100
Sanag		25	34	32	44	54	59	81

Table 131 - PE Pupil Performance on Reading Comprehension – Basic

	1	2	3	4	5	6	7	8
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Primary	0.7	2.7	3.6	3.9	4.6	4.7	4.8	4.8
Bari	0.0	3.0	3.5	3.8	4.2	4.0	4.3	4.2
Hayland		3.2	4.0	4.7			4.8	4.7
Karkar	0.8	3.5	4.2	4.5	4.6	4.7	4.8	5.0
Mudug	0.9	2.0	2.9	3.9	4.7	4.7	4.9	5.0
Nugal	0.0	1.7	4.3	3.6	3.7	4.8	5.0	5.0
Sanag	0.0	2.0	3.0	3.2	4.7	4.8	4.9	4.6

Table 132 - PE Pupil Performance on Reading Comprehension – Intermediate

	1	2	3	4	5	6	7	8
Primary	0.5	1.9	3.0	3.4	4.3	4.4	4.4	4.6
Bari	0.0	0.5	3.3	3.5	3.4	4.0	4.5	3.8
Hayland		3.2	4.0	4.0			5.0	4.7
Karkar	0.5	2.0	2.9	3.3	3.5	3.7	3.2	4.0
Mudug	0.5	1.5	2.5	3.4	4.4	4.7	4.6	5.0
Nugal		4.5	4.3	4.9	5.4	4.7	5.0	5.0
Sanag	0.0	1.7	2.6	2.5	3.8	3.8	4.2	4.8

Table 133 – PE Pupil Performance on Counting

	Grade							
	1	2	3	4	5	6	7	8
Bari	5.00	4.67	4.89	4.83	5.00	5.00	5.00	5.00
Hayland		0.00	1.18	5.00			4.23	5.00
Karkar	4.50	4.66	4.70	4.98	4.77	4.62	5.00	5.00
Mudug	4.91	5.00	4.96	4.98	4.97	5.00	5.00	4.97
Nugal	4.82	4.87	4.96	4.96	5.00	5.00	5.00	5.00
Sanag	5.00	4.63	5.00	5.00	5.00	5.00	5.00	5.00
Primary Total	4.76	4.78	4.74	4.97	4.97	4.94	4.89	4.99

Table 134 - PE Pupil Performance on Read the Number

	Grade
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	1	2	3	4	5	6	7	8
Bari	6.00	4.00	5.89	3.83	6.00	5.00	5.25	6.00
Hayland		3.00	1.53	2.00			2.00	1.83
Karkar	5.07	5.18	5.18	5.88	6.00	6.00	6.00	5.75
Mudug	4.69	5.14	5.55	5.78	5.97	6.00	6.00	5.97
Nugal	4.43	5.71	5.84	5.83	5.81	5.97	5.33	6.00
Sanag	0.00	1.19	2.92	4.82	4.75	5.29	5.18	5.57
Primary Total	4.69	4.91	5.28	5.57	5.82	5.89	5.11	5.52

Table 135 - PE Pupil Performance on Comparing Numbers

	Grade							
	1	2	3	4	5	6	7	8
Bari	2.00	2.33	4.78	5.00	4.29	6.00	6.00	6.00
Hayland		2.00	4.41	1.00			4.62	5.83
Karkar	4.25	3.50	3.21	4.24	4.15	4.46	4.58	4.63
Mudug	3.41	4.75	5.28	5.28	5.36	6.00	5.96	5.94
Nugal	4.50	3.96	4.16	5.70	4.92	5.47	5.52	6.00
Sanag	2.00	4.22	4.08	4.71	4.25	4.71	5.36	5.29
Primary Total	3.98	3.95	4.24	5.04	4.90	5.42	5.40	5.66

Table 136 – PE Pupil Performance on Addition

	Grade							
	1	2	3	4	5	6	7	8
Bari	5.00	1.00	4.11	3.50	3.86	4.67	5.00	4.00
Hayland		0.00	3.65	5.00			3.69	4.50
Karkar	2.86	3.63	3.70	4.46	3.92	4.08	4.33	4.38
Mudug	2.25	2.93	3.55	4.30	4.64	4.42	4.63	4.63
Nugal	3.11	3.03	3.78	4.17	4.21	4.38	4.38	4.78
Sanag	0.00	2.11	2.69	3.14	3.75	3.71	4.45	4.43
Primary Total	2.71	3.01	3.66	4.08	4.26	4.29	4.39	4.55

Table 137 – PE Pupil Performance on Subtraction

	Grade							
	1	2	3	4	5	6	7	8
Bari	4.00	1.67	4.00	3.00	3.29	4.67	4.75	3.50
Hayland		1.00	3.47	4.00			3.77	4.50
Karkar	2.68	2.98	2.91	3.63	3.54	3.46	3.67	3.13
Mudug	1.69	2.75	3.34	3.73	4.18	4.17	4.70	4.53
Nugal	2.00	2.12	3.16	3.35	2.97	3.56	4.24	4.33
Sanag	0.00	1.41	1.38	2.93	2.75	2.57	3.82	4.07
Primary Total	2.10	2.32	3.06	3.43	3.40	3.68	4.20	4.23

Table 138 – PE Pupil Performance on Multiplication

	Grade							
	1	2	3	4	5	6	7	8
Bari	0.00	2.67	4.22	4.50	3.71	5.00	5.00	5.00
Hayland		0.00	2.71	5.00			5.00	5.00
Karkar	2.79	2.38	2.52	3.17	4.54	4.31	4.58	4.13
Mudug	1.00	1.46	2.66	3.78	4.56	4.46	4.67	4.53
Nugal	1.04	1.58	3.04	4.24	3.94	4.56	4.62	4.33
Sanag	0.00	0.48	2.19	3.89	3.75	3.29	5.00	4.93
Primary Total	1.54	1.64	2.88	3.83	4.16	4.39	4.75	4.59

Table 139 – PE Pupil Performance on Division

	Grade							
	1	2	3	4	5	6	7	8
Bari	0.00	3.00	3.89	4.17	4.00	5.00	4.75	5.00
Hayland		0.00	1.65	2.00			5.00	5.00
Karkar	2.43	2.21	1.18	2.78	4.15	3.92	5.00	4.50
Mudug	0.91	1.07	2.43	3.38	4.26	4.38	4.81	4.50
Nugal	1.18	1.53	3.10	3.31	3.73	3.88	4.67	4.11

Sanag	0.00	0.33	1.46	3.46	4.13	3.57	4.09	4.79
Primary Total	1.44	1.51	2.63	3.25	3.97	4.05	4.74	4.56

Table 140 – Primary School Facilities' Condition

	Good	Acceptable	Needs improvement	Very poor	Summary score
Primary	6%	36%	41%	17%	2.6
Ayn	0%	0%	53%	47%	1.5
Bari	8%	56%	16%	20%	2.5
Hayland	33%	67%	0%	0%	3.3
Karkaar	8%	60%	15%	18%	2.6
Mudug	4%	42%	48%	6%	2.4
Nugaal	2%	5%	67%	26%	1.8
Sanag	15%	70%	15%	0%	3.0
Sool	5%	0%	74%	21%	1.9

Non-Formal Education

Table 141 – NFE Male-Female Equity & Access³⁶

	2013/14 EMIS		2014/15 EMIS		Lesson Observations		School Data Form	
	M	F	M	F	M	F	M	F
NFE	18%	82%	23%	77%	19%	81%	15%	85%
Ayn	30%	70%	28%	72%	11%	89%	0%	100%
Bari	11%	89%	11%	89%	0%	100%	0%	100%
Hayland			5%	95%				
Karkaar			12%	88%	33%	67%	26%	74%
Mudug	28%	72%	15%	85%	62%	38%	60%	40%
Nugaal	26%	74%	38%	62%	0%	100%	0%	100%
Sanag	13%	87%	25%	75%	49%	51%		
Sool	20%	80%	26%	74%	18%	82%		

³⁶ The 2015/16 EMIS data does not break down enrolment in NFE by the regions that Carfax lesson observation data were broken down by.

Table 142 – NFE Observed Instructional Quality

	NFE	Ayn	Bari	Karkaar	Mudug	Nugaal	Sool
Teacher has good subject knowledge	2.8	2.2	2	3.6	2.8	3	2.3
Lesson goals are clear	2.4	1.8	1.5	3	2.5	3	2
Expectations of learners are clear	2.5	2.3	1	3.4	2.3	3	1.8
Good use of resources and materials	2	1.7	1	2	2.5	1	2.5
Teacher knows their students and their needs	2.6	2.3	1.5	3.4	2.3	2.5	2.5
Teacher adapts to meet individual pupil needs	2.5	1.8	1.5	3.3	2.5	2.5	2.5
'Learning to learn' strategies are taught and practiced in class	2.3	2	1	2.8	2.5	1.5	2.3
Teacher gives individual students guidance and feedback	2.5	2	2	3.4	2.5	2	2.3
Cross-curricular learning is achieved	2.1	1.8	2	2.4	2.5	1	2.3
Teacher accepts responsibility for learner outcomes:	2.5	2	1.5	3.4	2.8	2	2
Instructor manages classroom behaviour well	2.8	2.5	1.5	3.9	2.5	3	2.3
Summary Judgment	2.4	2	1.4	3.1	2.5	2.1	2.3

Table 143 – NFE Pupil Performance on Letter Identification

	Grade			
	1	2	3	4
NFE	61	63	64	59
Ayn				42
Karkar	88	94	108	

Mudug			59	
Nugal	45	69	69	89
Sool		23	21	

Table 144 - NFE Pupil Performance on Invented Word

	Grade			
	1	2	3	4
NFE	32	47	37	48
Karkar	52	48	62	
Mudug			28	
Nugal	21	46	42	48

Table 145 - NFE Pupil Performance on Reading Comprehension – Basic

	Grade			
	1	2	3	4
NFE	3.0	4.5	3.5	5.0
Karkar	4.1	4.6	4.3	
Mudug			2.8	
Nugal	2.3	4.5	4.1	5.0

Table 146 - NFE Pupil Performance on Reading Comprehension – Intermediate

	Grade			
	1	2	3	4
NFE	2.2	3.7	3.2	4.9
Karkar	2.9	3.4	3.0	
Mudug			2.4	
Nugal	1.8	3.8	3.9	4.9

Table 147 – NFE Standard of Facilities

% of respondents	
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	Good	Acceptable	Needs improvement	Very poor	Summary score
NFE	0%	43%	29%	29%	2.0
Ayn	0%	0%	33%	67%	1.3
Bari	0%	0%	0%	100%	1.0
Karkaar	0%	100%	0%	0%	3.0
Mudug	0%	100%	0%	0%	3.0
Nugaal	0%	0%	100%	0%	2.0
Sool	0%	0%	67%	33%	1.7

Secondary Education

Table 148 - SE Male-Female Equity & Access

	% of total students broken down by gender							
	2012 EMIS		2015 EMIS		Lesson Observations		School Data Form	
	M	F	M	F	M	F	M	F
Secondary Total	62%	38%	65%	35%	60%	40%	63%	37%
Ayn	47%	53%	69%	31%	63%	37%	59%	41%
Bari	58%	42%	64%	36%	63%	37%	65%	35%
Gardafuu			67%	33%				
Hayland	79%	21%	69%	31%	72%	28%	61%	39%
Karkaar	60%	40%	61%	39%	53%	47%		
Mudug	67%	33%	65%	35%	52%	48%	58%	42%
Nugaal	62%	38%	67%	33%	63%	37%	61%	39%
Sanag	63%	37%	64%	36%	57%	43%	68%	32%
Sool	69%	31%	66%	34%				

Table 149 - SE Observed Instructional Quality

	Secondary	Ayn	Bari	Hayland	Mudug	Nugaal	Sanag
Teacher has good subject knowledge	3.1	2.1	3.2	4	3	3.4	3.6
Lesson goals are clear	3	2.1	3.1	3.3	3	3	3.8
Expectations of learners are clear	2.9	2.4	2.9	3.5	3.3	2.6	3.4
Good use of resources and materials	2.7	2.1	2.7	3.3	2.7	2.2	3.4
Teacher knows their students and their needs	2.8	2.1	2.8	3.7	3	2.4	3.4
Teacher adapts to meet individual pupil needs	2.8	2.3	2.8	3.8	3	2.4	3.6
'Learning to learn' strategies are taught and practiced in class	2.7	2.3	2.8	3.5	3	1	4
Teacher gives individual students guidance and feedback	2.7	2.5	2.7	3.5	2.3	2.2	3.6
Cross-curricular learning is achieved	2.6	2.5	2.6	3.3	3	1	3.8
Teacher accepts responsibility for learner outcomes:	2.7	2.1	2.6	3.5	3	1.8	3.8
Instructor manages classroom behaviour well	3.1	2.1	3.2	3.5	3	2.8	4
Summary Judgment	2.8	2.3	2.8	3.5	2.9	2	3.7

Table 150 – SE Pupil-Teacher Ratio³⁷

	Observed PTR	2012/13 EMIS PTR	2014/15 EMIS PTR

³⁷ 2015/16 EMIS data made available to Carfax does not break down PTR by region in the same manner as lesson observation data.

Secondary	46:1	26:1	32:1
Ayn	43:1	16:1	16:1
Bari	59:1	17:1	23:1
Hayland	32:1	-	19:1
Mudug	53:1	26:1	28:1
Nugaal	37:1	15:1	23:1
Sanag	28:1	24:1	29:1

Table 151 - SE Teacher Subject Knowledge

	%
Secondary	63%
Ayn	57%
Bari	65%
Mudug	77%
Sanag	57%

Table 152 – SE Standard of Facilities

	% of total respondents				Summary score
	Good	Acceptable	Needs improve ment	Very poor	
Secondary	40%	44%	16%	0%	3.2
Ayn	75%	0%	25%	0%	3.5
Bari	17%	83%	0%	0%	3.2
Hayland	75%	25%	0%	0%	3.8
Mudug	0%	100%	0%	0%	3.0
Nugaal	0%	0%	100%	0%	2.0
Sanag	100%	0%	0%	0%	4.0

% of total students broken down by gender

Technical and Vocational Education and Training

*Table 153 –
TVET Male-
Female Equity &
Access*

	2013/14 EMIS ³⁸		Lesson Observations		School Data Form	
	Male	Female	Male	Female	Male	Female
TVET	29%	71%	56%	44%	12%	88%
Bari	100%	0%				
Hayland	25%	75%				
Karkaar	23%	77%	100%	0%	0%	100%
Mudug	46%	54%			0%	100%
Nugaal	24%	76%	18%	82%	29%	71%
Sool	16%	84%				

Higher Education

Table 154 – HE Male-Female Access and Equity

	% of total students broken down by gender			
	2014 EMIS ³⁹		School Data Form	
	Male	Female	Male	Female
HEI	61%	39%	34%	66%
Ayn	68%	32%		
Bari	63%	37%	34%	66%
Karkar	60%	40%		
Mudug	57%	43%		
Nugaal	57%	43%		
Sanag	72%	28%		
Sool	82%	18%		

³⁸ 2015/16 EMIS data made available to Carfax does not break down TVET enrolment by region in the same manner as lesson observation data.

³⁹ 2015/16 EMIS data made available to Carfax does not break down HEI enrolment by region in the same manner as lesson observation data.



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