



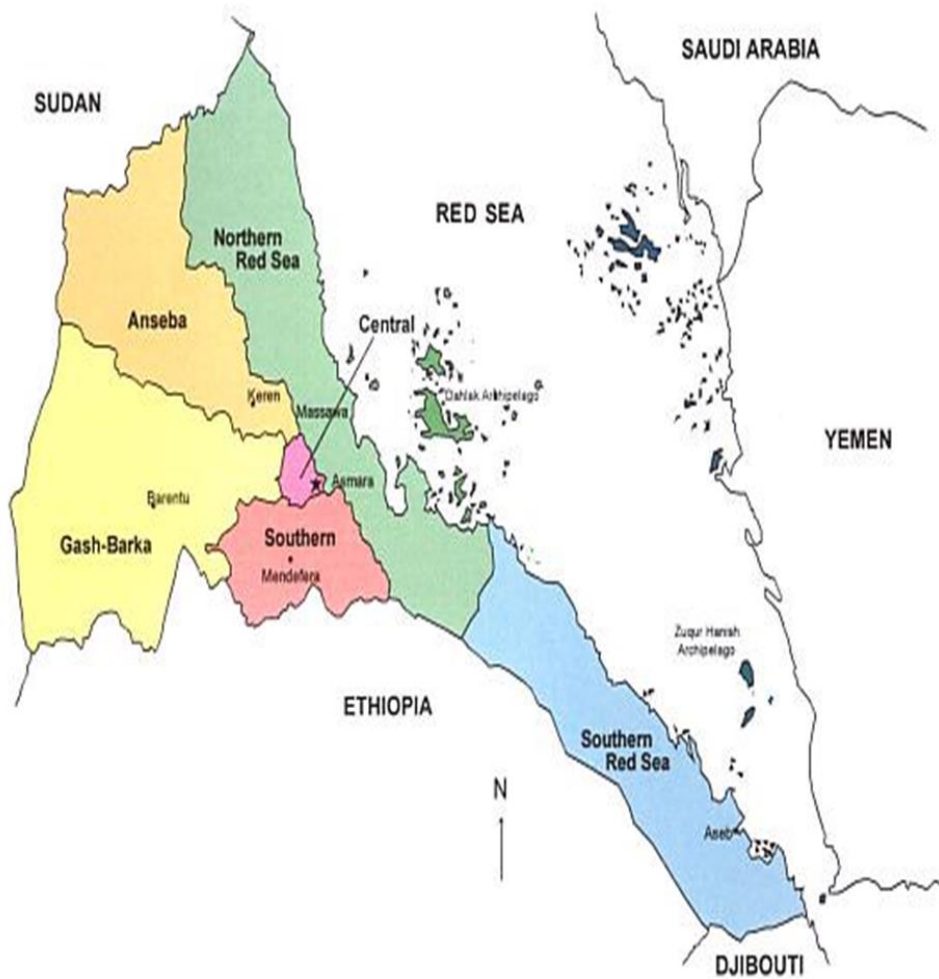
ERITREA

EDUCATION SECTOR PLAN

FEBRUARY 01, 2018

MAP OF ERITREA

Regional Administration of Eritrea



NB:This map is solely for the purpose of indicating the location of the administrative regions (Zobas)

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ABBREVIATIONS AND ACRONYMS

| | |
|------|---|
| ACCE | Asmara Community College of Education |
| CEE | Complementary Elementary Education |
| CPD | Continuous Professional Development |
| CCG | Community Care Givers |
| DKB | Debubawi Keih Bahri (Southern Red Sea) |
| ECD | Early childhood development |
| EIT | Eritrean Institute of Technology |
| EFA | Education For All |
| EMIS | Education management information system |
| EPHS | Eritrea Population and Health Survey |
| GAR | Gross Admission Ratio |
| GER | Gross Enrolment Ratio |
| GPI | Gender Parity Index |
| ICT | Information and Communications Technology |
| LAPG | Learner Assessment and Progression Guide |
| LMIS | Labour Market Information System |
| M&E | Monitoring and evaluation |
| MML | Minimum mastery learning |
| MLA | Monitoring of Learning Achievement |
| MHM | Menstrual Hygiene Management |
| MOE | Ministry of Education |
| NAR | Net Admission Ratio |
| NER | Net Enrolment Ratio |
| ODLP | Open and Distance Learning Program |
| PRC | Pedagogic Resource Centre |
| PRSP | Poverty Reduction Strategy Plan |
| PTSA | Parent-teacher-student association |
| PRR | Procedures Rules and Regulations |
| RCCC | Rural Community Children Center |
| SKB | Semiemawi Keih Bahri (Northern Red Sea) |
| SDC | Skills Development Centre |
| SDG | Sustainable Development Goals |
| TVET | Technical Vocational Education and Training |
| WASH | Water Sanitation and Hygiene |

EXECUTIVE SUMMARY

I. INTRODUCTION

The State of Eritrea, located in the Horn of Africa, shares borders with Djibouti on the south east, Ethiopia on the south and Sudan on the north and west. To the east, the country is bordered by the Red Sea extending 1,212 kilometers. Asmara is its capital city. For administrative purposes, Eritrea is divided into six regions (Zobas), 58 sub-regions, 704 administrative areas and about 2580 villages.

Around 65% of the population lives in rural areas, with the majority of the rural population depending on rain-fed agriculture for their livelihood, while a section of this population comprises of nomads and semi-nomads, tending sheep, goats, cattle and other animals and living off their milk and milk-products and the land. Similarly, the urban population is characterized by rapid growth, partly as a result of returning refugees from the neighboring and other countries, and partly due to high rural-urban migration. The scattered settlements coupled with nomadic and semi-nomadic life styles of rural population makes the provision of social services including education challenging.

Eritrea's economy is mainly based on rain-fed agriculture and livestock farming and in the areas of light industry. Currently, Eritrea is attempting to develop its mining sector by opening up to investors. However, since the last decade, Eritrea has experienced recurrent droughts and socio-economic challenges resulting from the no war no peace stalemate with neighboring Ethiopia. This has contributed to the slowing down of its normal growth and development.

The Government of the State of Eritrea considers education as key to national development. Thus, it is making significant investments in the development of the sector so that unrestricted access to education services is ensured to all Eritreans. These are clearly articulated in several policy documents including the Charter of the PFDJ, the Macro-Policy of 1994, the Interim Poverty Reduction Strategy Paper (I-PRSP, 2004), the National Education Policy (2011) and the Adult Education policy. All these policy documents endorse the provision of equitable access and the delivery of quality education at all levels for all citizens. The GSE emphasis on social justice is clearly articulated in the education system's **vision** as stated in the National Education Policy 2011:

Our education system aspires to produce all rounded citizens along with a firm commitment to country, people and social justice. This aspiration includes the development of creative and productive individuals who are capable of

contributing towards the attainment of a modern, competitive, harmonious and self-reliant Eritrea.

The 2011 National Education Policy underlines the Ministry of Education's commitment on reaching the unreached and the provision of good quality education to all the children and at all levels. It calls for the provision of free and compulsory basic education; the use of the mother tongue teaching at the elementary level; and the expansion of secondary and tertiary education opportunities as the most essential components of the education system. It also underlines the need to strengthen alternative routes for those who may not benefit from the formal provisions. These include the Complementary Elementary Education (CEE) for children who fail to enroll into elementary school at the right age, nomadic education for pastoral communities, and adult literacy, which targets adults who missed out on their educational opportunities.

Consistent with the Government of the State of Eritrea's commitment to the globally agreed targets of Sustainable Development Goals 4 (SDG4), "*Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*", as well as related targets, the new ESP 2018-2022 recognizes the synchronized processes and efforts that are taking place with respect to implementing SDG4 at national levels – both at multi-sector level, within the Education sector, and also within specialized sub-sectors (such as improving learning or early childhood care and education). To align with the above policy documents the **Mission** of the Ministry of Education during implementation of the new ESP 2018-2022 will be: *To provide a Quality and Relevant education consistent with the National aspirations to all Eritrean.*

In implementing its Vision and Mission, Eritrea will make its main strategic priority the improvement of quality learning, improving access to quality ECCE and school readiness, equity in view of social justice, relevance, access, efficiency and inclusiveness in Basic and Secondary Education with special attention to children with disability, the girl child and children from disadvantaged communities and the expansion of adult and non-formal education and the promotion of continued lifelong learning and striving to meet the Sustainable development goals (SDG 4). Access to technical and Vocational Training will increase, the existing collages will be rehabilitated and the public private partnership in the areas of skills development expanded.

The New ESP 2018-2022 was developed by a technical team of experts from Ministry of Education (MOE) based on the comprehensive sector analysis (ESA 2017) conducted and sequences of consultation workshops and meetings conducted with Education Working Group, the Steering Committee of the Ministry of Education, Regional Education Officers as well as representatives from Line Ministries and civil societies. The result of this workshops and consultative meetings was the basis for agreements on the broad lines of the ESP as well as on the objectives and strategies of each sub-sector. The ESP also outlines on what needs to be done to develop capacities at various levels in the ministry. Areas tackled under this section include developing a robust system of managerial structure and capacity development to effectively provide management support system at all levels in financial management, procurement,

information and reporting systems and infrastructure management; strengthening human resource planning systems in line with the ESP 2018-2022 aspirations.

II. THE SITUATION OF THE EDUCATION SECTOR

Overall Sector Condition

In Line with the sustained efforts to universalize access to basic education and meet the commitments of Education for All, sizeable progress has been made in expanding general accessibility to basic education including early childhood education services, secondary and technical and vocational education across the country.

In spite of these, the sector yet faces a dual challenge of increasing access to educational opportunities and improving the quality of education at all levels in the school system. Recently, the out-of-school country study report (2016) revealed that yet over 220,000 children of 5 to 13 years of age remain out-of-school. The analysis also disclosed a bulk of these out-of-school children are from pre-primary (73.0%) and middle school (40.9%) levels of education. Consequently, the critical issues and the overriding concern of the sector relates to ensuring equity of access to schooling throughout the country. Besides, the extensive Education Sector Analysis (ESA 2017) conducted, underscores improving the nature and quality of education especially at all level and sub-sectors as a major public concern.

Though government expenditure to education is relatively reasonable, still the financial burden becomes harder to bear as the Government takes responsibility to provide free education to all levels and sub sectors. The role of the private sector in education is insignificant. In addition to the public expenditure, the sector also benefited from external funding. Currently, the African Development Bank, UNICEF and the Global Partnership for Education (GPE) are supporting the ongoing ESP (2018-2022).

Access and Equity

In pre-primary level of education, though the general accessibility has increased from 8.6% in 2000 to 19.3% in 2015/16, participation is still very low and the number of ECCE centers owned by the government and privates sector are inadequate to meet the demand. It is also noted that the problems of pre-primary age children out of school are particularly widespread and the disparities among regions, rural urban residences and household wealth are wide. This sub-sector suffers from supply to demand side constraints. Moreover, despite the fact that the pre-primary education is part and parcel of the basic education program it is not regarded as compulsory.

In line with efforts to universalize access to primary education and achieve the Education for All (EFA) in the last decade general accessibly to primary education has significantly stretched from

85.4% in 2000 to 106.7% in 2015/16. However, yet there are critical issues and overriding concerns pertaining to equity of access to schooling throughout the country. Wider disparities in the general level of participation among regions/ Zobas, urban residences and children from nomadic communities and those living in geographically hard to reach rural areas is evident. Scattered settlements and the nomadic and semi-nomadic life styles of communities coupled with the socio-cultural and socio-economic factors have been the challenges to extend access to all children from disadvantaged communities. These led to the wide-ranging disparities in access to general education among regions and rural -urban residences.

Similarly, in middle level of education, the proportion of OOSC in the disadvantaged Zobas such as Gash Barka, Debubawi Keih Bahri and Semenawi Keih Bahri is higher than the national average (40.88%). The proportion of exclusion of middle school age children from rural areas (57.32%) is nearly six times higher than their counterparts from urban areas (10.6%). Besides, the proportion of middle school age out-of-school female children (45.25%) overweighs that of their male counter parts (36.85%) significantly. In secondary level of education, more than half of the secondary school age children (52%) are out-of-school. Females are more prone to be out of school (57.5%) compared to their male counterparts (46.7%). Furthermore, disparities among Zobas and rural -urban residences are wide.

In spite of government efforts and the tremendous success achieved to enhance equitable access to education through the supply of schools and well trained teachers with a special attention to the disadvantaged communities, there seems a huge wastage along the educational level from elementary to secondary. According to the findings in ESA 2017, the education pyramid of Eritrea 2016 depicts only 16% of the number of students enrolled in first grade complete secondary education.

Enrollment in TEVET currently stands at 5% of the total enrolment in general education and has shown a gradual increase since 2013/14 and reached 7368 in 2017/18. Female enrollment is encouraging and is currently at 46.2%. In spite of the economic and social demand of TEVET, the sub-sector is characterized by low enrollment, high unit costs, limited infrastructure, internal inefficiencies and inequalities in terms of access.

The adult and non-formal education sub sector composed of both literacy and post literacy programs has created access to 364,697 adults (of which 323,436 women) over the last 10 years. This large number of enrolment is believed to have an impact on the increased literacy rate in the country. The equity issue is strategically addressed in the provision of adult literacy in Eritrea. To this end, most literacy participants are from the disadvantaged areas of the country. Besides, the program is delivered in all nine local languages at the basic literacy.

One other component of the Adult Literacy and Non-formal education program is the complementary elementary education (CEE) program. This program caters the educational needs of over aged (9-14 years of age) out of school children. The total numbers of learners who have

been enrolled in CEE program since its inception in 2006 exceed 28,000. This alternative strategy of education provision is a three-year course and is equivalent to five years of elementary school and allows mainstreaming into the formal education at the junior level, or access to vocational training.

Quality and Relevance

The Ministry of Education has developed Early Learning and Development Standards (ELDS) defining all the required development domains and that guides the delivery of quality services in ECCE centers nationwide. A theme based ECCE curriculum has been developed for both year 1 (KG 1) and 2 (KG 2). The ELDS study conducted in 2011 revealed significant achievement in most of the development domains of children attending ECCE centers over children who lack early learning opportunities. In spite of this, shortage of trained teachers and specialized supervisors to regularly monitor and provide hands-on support has greatly affected the quality dimension of the ECCE provision.

In primary level of education, the Ministry of Education has been executing assessment surveys to gauge the quality of education and measure learning outcomes of children. Among others the Eritrea National Reading Survey (ENRS) and Monitoring Learning Achievement (MLA) could be cited. The findings of the MLA assessment surveys focusing on basic learning competencies in the domains of literacy and numeracy at grade 3 and 5 levels, disclosed low achievement rates of children. The 2015 national assessment to Monitor Learning Achievement (MLA III) revealed declining performance at Grade 5 students in attaining Minimum Mastery Level (MML) compared to similar study finding in 2008. In 2015, the proportion of grade 3 students who attained MML in the literacy and numeracy learning domains is much lower than results from 2008. Disparities in learning achievement among rural and urban residences and among regions are wide. The national examination administered at the end of the basic education cycle (Grade 8) also serve multiple purposes, including appraisal of the quality of education services, certification of completion of a specified level of education, and permit admission to the next level of education. Analysis made on this reveals that the pass rate in 2017 is much lower than that of 2015. This is attributed to inadequate early learning opportunities and low teacher coverage, which is aggravated by teacher attrition. MoE will endeavor to address this, specifically with regard to teacher training and professional development, and strengthening early learning opportunities as a head start advantages it offers for school readiness.

System Capacity and Management

The MOE central office is responsible for Education policy formulation, Education Sector Planning and Development, Curriculum Development, Human capacity development, setting standards, and Monitoring and Evaluation. The organizational structure of the Ministry of Education is composed of the Minister's Office, five Departments and six Regional education

offices. According to the decentralization Act 1996, the six Zobas Education Offices are responsible for overall administration and management of the education sector in their respective Zobas, except for Technical Vocational Education and Training (TVET) sub-sector and Teacher Training Institutes. The school management, together with the Parent Teacher Student Associations (PTSAs), are responsible for the overall school management and school development programs.

The Education information management system (EMIS) exists at school, Zoba (Region) and central levels and collates data from formal, non-formal and adult education and TEVET for policy, planning and management purposes. However, further system development, staffing, training and equipment are needed to further develop, expand, and manage the EMIS.

In general, with the existing limited professional capacity and skills at various levels of the Ministry and the availability of very limited material and financial resources, the performances of the administrative structures within the ministry cannot be undermined. By and large, it is assessed that the commitment and dedication of the staff is very encouraging. However, there were several challenges noted by the administrative structures which need due attention in the future to improve the institutional capacity of the ministry. Improving the overall management capacity and staffing in key functions, resource mobilization, efficient teacher management, advocate for increment of the domestic funding and cost sharing of the private sector, increased involvement of development partners including the global partnership for education (GPE) are some of the key identified priorities of the MOE in its drive to closely monitor and achieve the SDG's.

III. CROSS CUTTING ISSUES

Special Needs and Inclusive Education: The MoE accords school access for children with hearing and visual impairments in the three-segregated special elementary level schools. However, the capacity of these schools to cater for more enrolment is very limited and many children with hearing and visual impairments are out of school. As a long-term strategy, MOE believes the ongoing effort for consolidating inclusive education strategy will lead to a stage where by the segregated and special needs classes would be phased out. The MoE Policy and Strategy on Inclusive Education (2008), reaffirms that 'schools should accommodate all children', including children with disabilities.

Consequently, efforts are on-going to integrate children with disabilities including those with developmental disability into mainstream schools, in a self-contained special classroom. However, the needy from remote rural areas remain excluded, and the quality of education provision remains severely inadequate. Formal teacher training scheme and trained teachers, and modified or alternative curriculum and learning materials are not available to respond to students' special education support service. Besides, local belief systems and attitudes that stigmatize and deny discourage educational opportunity for these children are prevalent in communities. Additionally, absence of recognized Sign Language training for education, absence

of vocational training for students completing elementary or middle, and limited children's early stimulation in childhood periods are the observed challenges leading to the limited services for children with disabilities.

Information and Communications Technology (ICT): The establishment of an integrated system of ICT infrastructure, facilities and e-Learning solutions, along with qualified human resources, dedicated for teaching and learning, are key in enhancing the quality of educational provision and improving students' engagement, learning and achievement. As a result, MOE launched ICT in education program in January 2005 as a quality and institutional capacity development component of the educational reform process. The principal policy orientation of the program was to improve the quality of education by integrating ICT as a tool for teaching and learning as well as for educational management across the education sector. To this end, tremendous efforts have been made and significant successes achieved in ensuring this policy orientation by deploying ICT resources in schools, training and retraining teachers and curriculum development.

Despite the endeavors to integrate ICT in education, challenges including insufficiency of ICT equipment and facilities, inadequate teacher preparation and development to effectively utilize ICT as a pedagogical and management tool in schools, limited access to electricity and telecom networks posed a significant challenge in expanding ICT in education and greater disparities in opportunities.

Education in Emergencies: Nomadic and semi-nomadic life styles, the recurrent drought, strong seasonal winds and sand-storms that inflict heavy damages to school infrastructure and properties are some of the recognized hazards and risks to education service delivery. Thus, to be able to effectively respond to emergencies that likely disrupt education services, MOE drafted Emergency and Disaster Risk Reduction (DRR) Management Policy and Strategy and mainstreamed DRR in schools by sensitizing both learners and teachers.

Girls Education: Generally, enrolment and educational participation of girls has significantly increased during the last two decades. However, enrolment rate declines as one goes higher in education level and their participation is more acute in some of the ethnic groups and remote rural areas. This is largely related to the socio-cultural barriers, long distance to school and low value among communities of the value of education to the girl child. In response to this the MOE has, among others, drafted gender policy and strategy which endorses the need to raise gender awareness among communities, recruitment of more female teachers to serve as role models, provision of material and financial incentives to school girls, constructing gender segregated toilets and expanding access to boarding and para-boarding schools. Therefore, the current ESP will address priority actions identified in the ESA-2017.

IV. ESP 2018-2022 Program Overview.

Goals, Objectives, Strategies and Targets: In accordance with the overall national and sectoral priorities, and in alignment of the SDG-4 goals of “ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all”, the ESP (2018-2022) addresses the following three components:

- Access and Equity of General Education (pre-primary, elementary, middle and secondary education), Adult education and Technical and Vocational education.
- Quality and relevance of education of all levels and sub-sectors of education.
- Institutional Capacity building.

The Government’s Macro-Policy (1994) was the first document to establish the goals and objectives of the ESP which is also valid today. All subsequent National Education Policies formulated are to ensure: (i) equitable access for all children of citizens, (ii) the provision of quality education for all levels, and (iii) the efficient use of available resources. In line with these, the objectives of the ESP provide a direction for the development of the education sector. Following the analysis conducted using the ESA the specific objectives realized during the development of the ESP include: (i) increasing and improving equitable access at all levels and ensure gender equity; (ii) improving relevance and quality of education at all levels; and (iii) enhancing the capacity to plan, manage and monitor for better performance of education.

V. Sub-Sector goals

ESP 2018-22 focuses on priority programs which help overcome the above stated challenges. These are organized partly by sub-sector (pre-primary, primary, middle, secondary, general education, TVET) and partly by priority theme (quality, equity and improved management). Specific programs are developed for crosscutting. The main goals and some key outcomes for the six sub-sectors are as follows.

Pre-primary education, the main goal is promotion of holistic development of all Eritrean children from birth to six years, with specific objectives of increase access and ensure equitability of ECCE services to all, including vulnerable communities and groups; Improve the quality of ECCE teaching and learning environment; Enhance the professional capacity of ECCE service teachers, supervisors and administrators; Strengthening resources and quality of ECCE services; Strengthening and establishing partnership and integrated service delivery schemes to ensure holistic development of children 0-6 years, with key outcome of reaching GER of 40% and a NER of 30% by 2022/23.

Primary program based on the identified gaps indicated the main objectives to be achieved from 2018-2022 are creating opportunity of access of education to all primary school age children and improving the quality of the current primary education through enhancing the

competence of teachers and school managers, with key outcomes of reaching GER of 87.4% and NER of 100%.

The objectives of the 5-year plan for **the middle level** are to: create opportunity of equitable access to all middle school age children, make school environment conducive for the teaching/learning business, improve the quality of teaching and learning outcomes, strengthen - provision of support services, assessment practices, and monitoring implementation of activities, and enhance the alignment of national examination and curriculum demands for the middle level and improve support system and all the lacking school infrastructure. As a whole the key outcome in middle level is to reach GER of 79.9% and NER of 60%.

Secondary Education are set to address the identified challenges in the secondary education mainly to improve the quality and relevance of secondary education so as students are prepared to enter the workforce and higher education; to increase equitable access to a coherent secondary education system; to prepare a sound basis for an understanding and appreciation of science and technology together with the development of knowledge, values, attitudes and commitment to protect and improve the environment; Equip learners and teachers with adequate and relevant teaching learning materials; strengthen the professional capacity of the curriculum implementers; establish and strengthen the support system. The main key out-come is to increase the proportion of the secondary age group enrolled to GER of 48.7% and NER target of 40% by 2022/23.

TVET aims at providing access to Vocational High Schools for 10% of the students who complete grade 10. To ensure adequate supplies of competent, adaptable skills for the attainment of the government's overriding national development objective integrated knowledge and skills based education and training will be provided.

Adult and Non-formal Education: Adult education is understood as an organized learning, embodying literacy, post literacy and continuing education as well as vocational skills development. The overriding mission of this sub-sector is therefore to enhance access to and improve the quality of basic and further education (literacy, post literacy and continuing education) for children, youth and adults through non-formal means for the population outside the formal education structure. More specifically the objective is to raise the present estimated literacy rate of about 80 percent to more than 90 percent and enroll at least over-aged 25,000 OOSC by 2022. This is to be ensured by strengthening institutional capacity, providing effective and quality learning process as well as establishing comprehensive and adequate data base on the implementation literacy and continuing education programs.

Cross-cutting issues:

The crosscutting themes aim to focus attention on the situation of specific groups and on issues of particular importance, including: teacher capacity development; capacity development for

improved management; culture, sport and health, gender and education; special needs education; education in emergencies; school health.

VI. Monitoring and Evaluation.

The Monitoring and Evaluation Framework ensures a focus on outcomes and proposes mechanisms which will help the coordination between national, regional and sub-regional levels.

VI. Costs and Financing.

The cost and financing presents the overall financial status of the education sector. It summarizes the financial needs of the implementation plan and funding modalities of the education sector plan. It also explains issues of planning, budgeting, reporting and financial management. Moreover, the sector plan covers the monitoring and evaluation framework.

The overall cost of ESP is about USD 401,844.01.

The financing gap is estimated on the basis of assumptions about economic growth and about shares of education in the budget. The gap may be filled up in different ways. Among these includes: economic growth above the assumed rate; an increase in the share of education in the budget; support by development partners; an increase in the contributions by communities (for instance construction of selected facilities); a stronger reliance on cost-recovery and cost efficiency.

CHAPTER 1

NATIONAL CONTEXT

1.1 Geographic and Demographic Features

The State of Eritrea is located in the Horn of Africa, and lies north of the equator between latitudes 12°22' N and 18°02' N, and longitudes 36°26'E and 43°13' E. It has an area of 120,000 square kilometers. Eritrea shares borders with Djibouti on the south east, Ethiopia on the south and Sudan on the north and west. To the east, the country is bordered by the Red Sea extending 1,212 kilometers. The two main ports of Eritrea, Massawa and Assab, are situated along the Red Sea coastline. Asmara is its capital city. For administrative purposes, Eritrea is divided into six regions (zobas), 58 sub-regions, 704 administrative areas and about 2580 villages.

The Eritrean landform is highly diversified containing mountain ranges, deep gorges, lowland areas, coastal plains and offshore islands. It has a high central plateau that varies from 1,800 meters to 3,000 meters above sea level. Coastal plains, western lowlands, and some 350 islands comprise the remainder of Eritrea's land mass.

Changes in topography can easily be noticed within a few hours of travel from west to east and vice -versa. This physical diversity offers diverse climatic features with highland areas getting relatively more rain and cooler weather as compared to the lowland areas. The proximity of the climatic diversity is reflected in the Ministry of Tourism slogan 'three seasons in two hours'.

In addition, Eritrea's physical and climatic diversity has direct influence on the socio- economic lifestyles of many communities. In general, communities living in physically hard to reach and drought prone areas tend to lead pastoral and nomadic lifestyles. This compounds the challenge of distance in terms of the provision of integrated social services, including education.

1.2 Demographic and Administrative Profile

Eritrea is a multi-ethnic society with nine different ethnic groups speaking nine different languages and professing two major religions, namely, Christianity and Islam. These are Afar, Bedawiet, Bilen, Kunama, Nara, Rashaida, Saho, Tigre, and Tigrigna. These groups speak languages which belong to two world language families (Afro-Asiatic and Nilo-Saharan). However, there are structural linkages and common bonds among them mainly due to collective historical and cultural experiences. These linkages and bonds were further solidified during the 30 years' war for liberation.

Eritrea operates an administrative structure comprising 6 regions, 58 sub-regions, 704 local administrative areas and 2580 villages. Public participation in decision making processes is facilitated through elected assemblies and community based local administrative and court systems. Nationally, decentralization as a mechanism for transferring certain level of

responsibility and authority to local administrations has been operational since the proclamation of Decree No.86 in 1996. Within the framework of this decree, regional administrations have been empowered to take decisions on a wide range of issues including education and other social services in consultation with local communities.

Most of Eritrea's population is young and outside the economically active group. This creates burden on the working population. It also suggests a challenge and an opportunity in terms of developing a substantial pool of human resources for the country.

Average fertility rate in Eritrea is 4.8 children per woman. There was a decline in average fertility rate between 1996 and 2002, dropping from 6.1 children to 4.8 children per woman. The situation has remained more or less the same since 2002. Fertility rates are lower in urban areas which is 4.3 children per woman than in rural areas which is 5.6. In Asmara, the capital city, the fertility rate (2.9 per woman) is even lower than the national average. The rate of fertility likewise decreases as the level of education increases. The fertility rate for women with no education at all is 5.5 children per woman and is significantly higher than women with some secondary education which is 3.1 children per woman. There is also marked variation in fertility according to wealth index. Women in the lowest wealth quintile have total fertility rate of 6.1. This figure is almost double in comparison with the fertility rate of women in the highest wealth quintile- 3.2.

Around 65% of the population lives in rural areas, with the majority of the rural population depending on rain-fed agriculture for their livelihood, while a section of this population comprises of nomads and semi-nomads, tending sheep, goats, cattle and other animals and living off their milk and milk-products and the land. Similarly, the urban population is characterized by rapid growth, partly as a result of returning refugees from the neighboring and other countries, and partly due to high rural-urban migration.

The population of Eritrea is not evenly distributed across the country. Most of the population (about 50-60%) lives in the highlands and lead sedentary lives (EPHS 2010). The rest of the population lives in wide, sparsely populated areas. A section of the latter leads nomadic life, moving from place to place, as the seasons and the demands of life dictate.

In some lowland areas, it is hard to provide social services (education, health, etc) as the people live in small, scattered settlements. To this end, the Government gives due stress to the establishment of settlements for the scattered villages and provide social services.

Small segments of the rural population (mainly those that live near the coastal areas) are fishermen, and depend for their livelihoods on the sea. The rest of the population, about 20% of the total are small traders, government employees, and other self-employed people, and live in urban and semi-urban areas.

1.3 Macroeconomic Context

As stated above, about 65% of the population of Eritrea lives in rural areas. This has a tremendous impact on the economic activities of the country. For this reason, Eritrea's economy is mainly based on rain-fed agriculture and livestock farming. It also relays on undeveloped areas of light industry, fisheries, and services that includes tourism, which the Government is trying to build up by developing a number of key infrastructures.

Compounding these challenges, Eritrea has experienced recurrent drought, which has slowed down its normal growth and development. In addition, degradation of land, inadequate infrastructure, and shortage of skilled human power pose constraints to its overall development.

Recently, Eritrea is attempting to develop its mining sector by opening it to investors, which has attracted some foreign mining companies, aiming to mine for gold, copper, potash, and other minerals. The IMF estimates that Eritrea's GDP will grow by 3.6% by 2018. The per capita income was USD 1,343.7 in 2016, and in 2018 it is expected to increase by 59.14% as compared to that of 2017.

Despite numerous challenges, Eritrea has undertaken rehabilitation and reconstruction of the economy with food security at the top of the Government's agenda, followed by rehabilitation and rebuilding of infrastructure, and the provision of social services based on the principle of social justice. In the last decade Eritrea has experienced recurrent droughts and coupled with the no war no peace stalemate with neighboring Ethiopia has exacerbated the socio-economic challenges slowing down normal growth and development. Worse yet, degradation of natural resources, inadequate infrastructures, and shortage of skilled human power pose daunting constraints to its overall development process.

Eritrea's economy is mainly based on agriculture, light industry, fisheries and services including tourism. Almost 80 per cent of Eritreans live in rural areas, with the majority relying on rain-fed agriculture and livestock rearing for their livelihoods. Eritrea is presently developing its tourism industry around the Red Sea port of Massawa and has started exporting mining products.

1.4 The Education Context

The Government of the State of Eritrea considers education as key to national development. During the era of armed struggle for independence a new education system was established by reforming the curriculum of the successive colonial powers, which deliberately perpetuated marginalization of Eritreans and subjected them to degrading experiences and concepts that undermined the dignity of Eritreans. For example, the teaching of Eritrean languages was replaced with instruction in the national language of the occupying forces.

During the struggle for Eritrean independence, education was considered critical to the success of the struggle and accordingly the Eritreans involved in the struggle were given quality education even at the battlefield. The new National curriculum was developed and literacy began

to be given in all local languages. Schools were set up mostly in open spaces in the liberated areas. Everybody in the front line or behind was encouraged to learn irrespective of their age, gender, ethnicity, religion, location and occupation through formal and non-formal means. Mobile schools were opened for nomadic populations. The experience gained formed the basis for the innovative strategies of educational service being delivered in the last two decades.

Since 1993 the education sector has experienced significant progress in terms of rehabilitation of infrastructure and in the general expansion of the education system. The government's macro policy objectives for education are: i) development of a population equipped with necessary skills, knowledge and culture for a self-reliant and modern economy; ii) development of self-consciousness and self-motivation in the population to fight disease, attendant causes of backwardness and ignorance; and iii) provision of basic education to all, regardless of their ethnic origin, sex and religion. These macro objectives have subsequently been reconfirmed by the current National Education Sector Plan 2018-2022 of the Ministry of Education.

The Macro-policy (1994), the National Education Policy and Adult Education policy provide guidelines to uphold the equitable access and delivery of quality education at all levels for all citizens. In the last two and half decades, the education sector has experienced significant progress in terms of rehabilitation of infrastructure and in the general expansion of the education system.

The GSE emphasis on social justice is clearly articulated in the education system's vision as stated in the National Education Policy 2011¹:

Our education system aspires to produce all round citizens along with a firm commitment to country, people and social justice. This aspiration includes the development of creative and productive individuals who are capable of contributing towards the attainment of a modern, competitive, harmonious and self-reliant Eritrea.

After independence in 1991, education for all was pursued with renewed vigor and spread to all parts of the country. The clearest testament to the government's commitment to resolve the elimination of illiteracy was the foresighted declaration of free and compulsory education for all Eritreans across all levels including secondary and tertiary education.

Eritrea recognizes the importance of education and training as a fundamental breakthrough for the development of the country. Education develops the knowledge and skills required for a vibrant, competitive economy. It enables people to generate increased income and lift themselves out of poverty. It fosters social development and equality among the people. For these reasons, the Government considers education to be the cornerstone of all national development efforts,

¹MoE, National Education Policy, 2011

particularly in human resources development, economic growth and poverty alleviation. Accordingly, it is making significant investments in the development of human resources by providing unrestricted education and health services for the entire population, so that they are able to fully participate in the civic, cultural, political, social and economic affairs of their nation.

The Ministry of Education adopted a three-pronged structure reiterated in the National Education Policy of 2011, consisting of basic education (that comprises pre-primary, elementary and middle school), secondary education, and tertiary education. The structure allows combinations of parallel formal and non-formal channels of basic education with opportunities for transition from one system to the other. The policy further provides for transition between different education channels in the system based on combinations of accredited academic performance and experiential learning. The merit of this system is that it allows flexibility and a second chance to education for the large number of children, adolescents and young people who are out of school. The target of the 2010 NEP was to reach EFA goals by 2015.

The 2011 National Education Policy underlines the Ministry of Education's commitment on reaching the unreached and the goal for creating a literate society that can provide good quality education to all children at all levels. It calls for the provision of free and compulsory basic education; the use of the mother tongue teaching at the elementary level; and the expansion of secondary and tertiary education opportunities as the most essential components of the education system. It also provides alternative routes for those who may not benefit from the formal provisions. These include the Complementary Elementary Education (CEE) for children who fail to enroll into elementary school at the right age, nomadic education for pastoral communities, and adult literacy, which targets adults who missed out on their educational opportunities. Upon successful completion of grade 12 and the National Secondary Education Certificate Examination (NSECE) a student can enter one of the colleges. Consistent with the Government of the State of Eritrea's commitment to the globally agreed targets of SDG4, ***“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”***, as well as related targets,

The ESP of 2018-2022 recognizes the synchronized processes and efforts that are taking place with respect to implementing SDG4 at national levels – both at multi-sector level, within the Education sector, and also within specialized sub-sectors (such as improving learning or early childhood care and education). The prime objective of the ESP 2018-2022 will be: ***To provide a Quality and Relevant education consistent with the National Standards to all Eritrean citizens at all levels.*** Taken together, the above sentiments and goals can be described as the vision of and mission for the Education Sector in Eritrea.

In order to realize its Vision and Mission of education, the Government of the State of Eritrea (GoSE) sets out its ***strategic priorities*** as follows:

Access and equity

Improving access to quality ECCE to ensure solid foundation of schooling at formative age;
Address issues of access, equity, inclusiveness, relevance and efficiency in all levels and forms of education and training;

Give special attention to children with disabilities, the girl child, children from disadvantaged communities and out-of-school children, in view of realizing the principle of social justice;

Expanding access to and enhancing quality of Technical and Vocational Education and Training and skills development programs to produce employable work force in line with national development plans

Quality and Relevance

Improving the quality and relevance of education and training at all levels;

Leveraging the potential of ICTs for qualitative transformation of the teaching/learning process

System Capacity and Management

Expanding ICT for Human and institutional capacity development for effective and efficient service delivery and management of the education sector;

Strengthen systemic coordination in planning, implementation and monitoring and evaluation of these strategic priorities so as to facilitate the provision of inclusive and equitable quality education and promote life-long learning opportunities for all, thereby achieving SDG-4.

Apart from the two years of pre-school, basic education lasts 8 years and is split into grades 1-5 (elementary) and grades 6-8 (middle). Secondary education lasts four years (Grades 9-12) and it provides general secondary education in arts and sciences. There are also technical and vocational training secondary schools where students join from general education after the completion of grade ten. Upon completion of secondary education based on their performance in the secondary education certificate examination students join institutions of higher learning (tertiary), or go into technical and vocational education and training (TVET).

1.5 Process of Developing the ESP 2018-2022

To develop the ESP 2018-2022, the MoE and stakeholders began Education Sector Analysis (ESA) and prepared the first draft of the logical frameworks submitted by each department of the Ministry. The frameworks served as the main logical framework of the ESP.

The Steering Committee of the Ministry reviewed the draft ESP following the guidance given from the Steering Committee. This was followed by a National Consultation Workshop in which the Director Generals (DGs) Departments, division directors, experts including Regional Education Officers as well as representatives from Line Ministries, civil societies and other stakeholders participated. The result of this workshop was an agreement on the broad lines of the ESP as well as on the objectives and strategies of each sub-sector. The workshop also gave some guidance on how to reduce costs to fit the ESP within the availability of financial resources. After the workshop, the ministry made such adjustments to the expenditure framework.

Education is an active, constantly evolving and growing sector; any long-term plan must consider current activities and medium-term goals and plans. The Plan is developed taking into consideration that it needs to be flexible so that it responds to evolving policies and priorities that emerge from studies, reviews and evaluations.

1.6 Relationship between Education and Development

International economic competition among countries and regions of the world is becoming more and more intense. While globalization is increasing parallel with technical development all countries seem to agree to and focus on the importance of education and training. Improvement of access and quality of education has been identified all over the world to be among the most important keys to development. Countries which have succeeded economically, and where this development is not only based on extraction of natural resources such as oil or minerals, have in common large educational investments at earlier stages of their development.

There also seems to be international agreement today that it is important to invest and improve all levels of education, from pre-primary and all the way up to university levels. In terms of the scope of education, there is agreement that one should focus broadly and strengthen both academic, technical, general skills and vocational education. The international development is to a large extent based on technical innovations which all segments of the population need to participate in and utilize. This raises the demand for people of all ages to develop creativity, cognitive abilities and skills to interact with challenging technologies; hence, enhance the importance of life-long education.

Like-wise the GoSE has embarked on a wide-ranging program designed to revitalize and develop the collapsed economy and to promote its long-term growth. The overall vision of Eritrea's future progress is ultimately to tone up the human capital, particularly through strengthening the education and health sectors (GoSE, 1994).

The Government considers Education as a high priority in the development of the nation's human resources as a means of poverty alleviation and promoting economic growth. Eritrea is in the process of reforming its education and training programs in order to address the various needs and gaps in the near future. To this end, Eritrea's over all poverty alleviation strategy and national development framework depend on raising the general level of education and training among the population so that citizens have the necessary potential to participate in developing the economy as well as the democratization process.

In general, the education and training sector in Eritrea could be characterized as:

- Low access and equity to education at all levels;
- Low level of learning achievement;
- Inadequate output of teachers from colleges;
- Low access to and quality of TVET education;

- Poor infrastructures and teaching learning materials;
- A population with low level of literacy skills and many village communities deprived of low access to basic literacy;
- Illiterate environment with no or very little materials to read and very low habits of reading among the population;
- Limited provisions of continuing education (non-formal middle and secondary education including vocational skills training)
- Uneven distribution of social services such as education among the adult population especially the youth. Those residing in urban areas have a better advantage than those residing in rural areas in training and education;
- No systematic, monitoring and assessment mechanism is in place.

The country is very much aware of the impact that a literate population can have on its economic, cultural, social and political development. It is also equally conscious that the building of peace, democracy and democratic institutions has good chance of success with a literate society. Poverty alleviation and sustainable economic growth are promoted through increased basic literacy skills provision which creates a conducive environment for implementing new ideas and innovation (Source: Eritrea confintea VI report).

Eritrea places strong emphasis on education. The Macro Policy of Eritrea states, among other things, that in the long term, Eritrea will be producing “knowledge intensive” goods and services able to penetrate the world market (Government of Eritrea (GoE), 1994). The emphasis on education is also reflected on the government’s policy on poverty eradication (Rena, 2006).

Soon after liberation in 1991, the educational reconstruction process in Eritrea gained top priority and recorded drastic changes at all levels including primary, middle, secondary and tertiary education.

The priority-based political will of Eritrea to build manpower resource ingrained with discipline and literacy skill is unique in the rest of the African continent. While a closer analysis of such developments will be of extreme importance for national builders and educational administrators of Eritrea, its future impact and long term benefit will be an ideal case study for educational reformists around the world. For a young nation, Eritrea’s human capital formation plays a cardinal role in activating the process of socioeconomic transformation. (Source: International Journal of Scientific Research in Education, JUNE 2008, vol. 1(1), 41-53).

1.7 Institutional Framework

In order to fully implement the ESP, the efficiency of managerial support system and structures of education will be the key concern and given more value. For this reason, it is important to identify the system within which the ministry needs to function. In this case, restructuring and

strengthening of management systems are the main concern for the effectiveness and efficiency of ESP implementation.

From the previous (Education Sector Development Plan (ESDP) implementation point of view, it has been learnt that managerial services such as planning, financial management, procurement, monitoring and evaluation, supervision and capacity development affects directly for the implementation of the education programmes.

1.7.1 System Capacity and Management

To carry out and implement the targets set in the ESP 2018-2022 successfully, the MoE will put emphasis on the following:

- Create mechanism to support Zobas and schools for best performance and high internal efficiency;
- Building capacity on leadership and management system at Zoba and school level;
- Enhance the system for record management system and human resource performance information;
- Enhance the performance of the management support system in planning, financial management, procurement and monitoring and evaluation systems;
- Strengthen the coordination with all stakeholders and development partners.

1.7.2 Institutional Structure

Leadership

In order to enhance the performance of leadership system, the MoE will organize a training program both at central and Zoba offices. Along with this, the MoE needs to establish a policy for human resource management that includes appointment of leadership positions and performance measurement of staff.

The MoE will also need to remedy overlapping and conflicting roles and functions that exist within the departments. Furthermore, the ministry will review and evaluate tasks and responsibilities and accordingly, to mitigate the existing overlaps.

Planning, Monitoring and Evaluation Capacity

The MoE is cognizant of the importance of having best mechanisms in planning, monitoring and evaluation (PM&E) that direct to the successful implementation of the ESP program. In this regard, the ministry will establish clear guidelines on PM&E and carry out training programs to support effective rollout of PM&E functions. Moreover, the ministry will also develop a comprehensive and integrated Educational Management Information System (EMIS) to properly monitor the function of the ministry at all levels, monitor and report on SDG Goals. This can be assured by providing training to personnel on how to record and monitor the implementation and management of ESP.

Management Capacity

It is imperative to enhance the capacity of management at all levels, for the effective and efficient implementation of the ESP. To this end, the ministry will engage in training the personnel and set mechanisms to retain personnel. It also requires to ensure a systematic deployment of personnel which is transparent and responsive. Moreover, refresher courses need to be provided continuously to enhance the managerial skill.

Financing

Effective and efficient allocation and management of resources are essential for successful implementation of the ESP. Different training programs related to accounting, financial management and integrated financial management system will be planned as capacity development.

Procurement

The government of Eritrea adopts a policy of central procurement procedure. The MoE as a government institution has a unit mandated to carry out the procurement required by the ministry in line with the government policy. This unit at the MoE is established with the required staffing. The ministry will enhance the capacity of the unit in order to perform procurements as required effectively during the implementation of the ESP.

Infrastructure

The enrollment projections made by the MoE shows that many classrooms are required to be constructed in the coming five years in order to accommodate the growing number of enrollment at all levels. In order to reduce the crowded class size and enhance the quality of learning, additional classrooms are required to be constructed. The intervention in infrastructure is ensured by allocation of adequate financial resource, engaging community participation and local construction companies.

CHAPTER 2

CURRENT STATUS OF THE EDUCATION SECTOR

2.1 Overall Sector Conditions

Building the education sector has been a priority for the Eritrean government in the past decades with commitments to free education for all Eritreans across all levels including secondary and tertiary education.

The 2011 National Education Policy also underlines the Ministry of Education's commitment on reaching the unreached and the goal for creating a literate society that can provide good quality education to all children and at all levels. It calls for the provision of free and compulsory basic education; the use of the mother tongue teaching at the elementary level; and the expansion of secondary and tertiary education opportunities as the most essential components of the education system. Anchored on the principles of social justice, the government of the state of Eritrea policy documents embraces the equity dimension in efforts to expand access to general education.

The MOE - the government body responsible for the provision of education and training in Eritrea, is in charge of training of teachers, curriculum planning and development, implementation, and the provision of textbooks. The Ministry also recruits teachers, sets standards, provides policy framework, monitors and evaluates the whole sector. Moreover, it procures school facilities including furniture, teaching and learning materials as well as constructing class rooms, teachers' quarter, Pedagogic Resource Centers (PRCs), laboratories and other school infrastructure.

In Line with the sustained efforts to universalize access to basic education and meet the commitments of Education for All initiative, sizeable progress has been made in expanding general accessibility to basic education including early childhood education services across the country. Consequently, the number of primary schools over the years 2000/01-2015/16 exhibited progress by 37.8% and the GER and NER stretched from 85.4% and 58.8% in 2000/01 to 106.7% and 82.1% in 2015/16 respectively. In lower secondary school the GER and NER expanded from 62.8% and 16.7% in 2000/01 to 75.4% and 40.9% in 2015/16 respectively. The number of secondary schools increased from 43 in 2000/2001 to 104 in 2015/2016.

Despite efforts to meet national and international commitments and the declaration of free education at all levels, Eritrea like countries in the region, faces the dual challenge of increasing access to educational opportunities and improving the quality of education at all levels in the school system. Recently the out-of-school children country study report (2016) revealed that yet over 220,000 children of 5 to 13 years of age remain out-of-school. The analysis also disclosed a

bulk of these out-of-school children are from pre-primary (73.0%) and middle school (40.9%) levels of education. Consequently, the critical issues and the overriding concern of the sector relates to ensuring equity of access to schooling throughout the country. Wider disparities in the general level of participation among Zobas, gender gaps, low levels of participation of children with disabilities, children from nomadic communities and those from geographically hard to reach rural areas typifies the education sector.

Besides, the extensive Education Sector Analysis (ESA 2017) conducted underscores improving the nature and quality of education especially at basic education level as a major public concern. Studies carried out to monitor the learning achievements (MLA) of children to generate comprehensive information, support policy suggestions and reform in 2001, 2008 and 2015 indicated a declining trend in learning achievements. Findings from the third-round MLA survey (2015) flagged a falling trend in performances at Grade 5 where only 25.4% of students attained the minimum mastery level (MML) compared to 49.9% in 2008. The inadequate coverage of teachers, heightened teacher attrition compounded by low numbers of untrained and unmotivated teachers, impacted adversely the quality of education. Limited involvement of parents and communities and poor monitoring and evaluation practices also influenced the provision of quality services in the sector.

Though secondary and higher education is not compulsory, provision of education at these levels and technical and vocational training is free in Eritrea. The financial burden becomes harder to bear as the Government takes responsibility to provide free education at all levels and sub sectors. The role of the private sector in education is insignificant as compared to the student population.

The overall government expenditure on education between 2008 and 2011 was about 8-10% of the total national expenditure. Based on the Gross Domestic Product (GDP) estimates of the World Bank, the share of education from the GDP is between 2.6 to 3.7%. Though very slightly, government expenditure on basic education sub-sector has fluctuated. For example, Government expenditure on basic education in 2008 was 25.3% of the total government's education spending. This declined very slightly to 25.1% in 2011. Similarly, the non-salary Government expenditure on basic education in 2008 was 50.7% decreased to 42.3% in 2011.

In 2015, the share of education of the total Government expenditure was 10.5%. The share of the recurrent and development expenditure of the total Government expenditure amounted to 9.16% and 1.34% of the total Government expenditure. In the same year, education contributed an estimated 1.14% of GDP. Government spending on education increased from 10.49% in 2013 to 12.33% in 2014, but showed a slight decline 10.05% in 2015 and 10.06% in 2016. In 2015, out of the Government expenditure on education, 31.01% was expended on primary and middle school, which shows the Government's priority and commitment to compulsory and free basic

education. Secondary education received 23.28% greater than the amount for middle school but much smaller than the amount for primary schooling.

In the recent past the Eritrean Education system has benefitted from other external sources of funding. In 2003-2008, the World Bank supported the Education Sector Investment Project (ESIP), which later became the Education Sector Development Program (ESDP). Between 2005 and 2009, several development partners such as African Development Bank, the European Union, UNDP, UNESCO, UNFPA, UNICEF, and the World Bank were involved and supported the Education Sector Development Program (ESDP). The above mentioned development partners provided a total of USD 90,9 million and Euro 53 million in the form of grants and extended loans during the same period .

Currently, the African Development Bank with USD 19.7 million, UNICEF with USD 9 million and the Global partnership for Education (GPE) with a country allocation of USD 25.3 million are supporting the ongoing ESDP (2013-2017). The Africa Development Bank with its contribution is supporting the Vocational Education and Training sub-sector, while UNICEF and GPE are supporting basic education sub-sector in Eritrea. In general, external sources of funding are a small portion of the total financing required by the sector. Community contribution could not be determined although it is believed to constitute a significant amount. It is mostly contribution in kind, labor (for example- construction of classrooms) and the provision of school items, school uniforms, and payment for utilities and other operational costs.

2.2 Access and Equity

One of the three themes on which Eritrea's ESP is founded relates to access and equity to distribute and utilize resources and opportunities to reach all members of society. The MOE's initiatives and efforts in this regard and as identified by the ESA of 2017 are presented in the following subsequent paragraphs.

2.2.1 Pre-Primary Level

The official entry age to pre-primary level of education in Eritrea is 4 years of age. Pre- school is provided in a comprehensive and integrated learning program for two years. Pre-school takes two forms: The Formal kindergarten and the Non-Formal Community Care Giving Center (CCG) or Rural Community Children's Centers (RCCC). The main objective of the pre-school curriculum is laying a foundation for language and concept development, social relationships, and the holistic development of the child, including basic life skills.

The GoSE, as an integral part of its commitment to the Education For All (EFA) and currently to Sustainable Development Goals (SDG's), has offered much attention to enhancing ECCE programs throughout the country. The MOE has focused on implementing cost effective strategies to enhance access to ECCE with due consideration to equity, fairness and social

justice. Central to the Ministry’s activities include the involvement and coordination of all stakeholders in the program including Global Partnership for Education (GPE).

The MOE took a number of important steps to secure quality provision by preparing basic items for the realization of its objectives. The number of early childhood learning centers increased from 90 in the year 2000 to 506 in 2015/2016. Out of the total pre-primary schools 217 are Rural Child Care Community Centers (RCCCs), which are providing early learning opportunities to rural and disadvantaged children. The ESA of 2017 indicates that in the year 2014 and 15, there was an increase of RCCCs by 10% and 5% in terms of the number of trained teachers and the total number of schools nationwide as of 2014 -15. However, the current enrolment at this level is low - GER 19.2% and NER 17.6% in 2015/16. This is illustrated in Table 2.1 below.

Table 2.1: Pre-primary Level Enrolment Trend

| Year | Enrolment | | GER | | Net Enrolment | | NER | |
|---------|-----------|--------|-------|--------|---------------|--------|-------|--------|
| | Total | Female | Total | Female | Total | Female | Total | Female |
| 2011/12 | 45,973 | 23,378 | 31.5 | 32.3 | 28,952 | 14,151 | 19.9 | 20.2 |
| 2012/13 | 46,448 | 22,797 | 24.8 | 24.9 | 38,869 | 18,964 | 20.7 | 20.8 |
| 2013/14 | 45,291 | 22,096 | 21.2 | 21.2 | 35,953 | 17,504 | 16.8 | 16.8 |
| 2014/15 | 42,122 | 20,399 | 18.2 | 18.0 | 38,443 | 18,615 | 16.6 | 16.4 |
| 2015/16 | 45,233 | 21,969 | 19.3 | 19.2 | 41,294 | 20,081 | 17.6 | 17.5 |

Source: Eritrea, *Essential Education Indicators 2015/16*

When compared to the total population of pre-primary school age children in the country, participation is still very low and the number of ECCE centers owned by the government and privates sector are inadequate to meet the demand. Besides, 57% of pre-primary school centers are situated in only two regions (Maekel and Debub) out of the six administrative regions of the country, signifying imbalance in access. The disparity among regions is high with Maekel having gross and net enrolment rates of 41.1% and 39.6% respectively while Gash Barka the figures are only 8.7% and 6.4% respectively (EMIS 2015/16). It is also notable that the problem of pre-primary age children out of school is particularly extensive in Gash Barka (92.6%), Northern Red Sea (89.9%), Southern Red Sea (84.4%) and Debub (82.9%)².

The OOSC country study (2016) also reveals that household wealth and place of residence (rural versus urban) affects 5-year-old children’s enrolment and participation in pre-primary schools. Largely, children who are not benefiting from pre-primary education and who may not be adequately prepared for primary education are from the poorest wealth quintiles and from rural areas. More specifically, 28.5% of children from the poorest wealth quintiles (as compared to the 3.9% children from the richest wealth quintiles) are not attending pre-primary education, demonstrating that children from the poorest wealth quintiles are seven times more likely to be out-of-school than their peers in the richest quintiles.

²The OOSC country Study, 2016.

There is a direct correlation between rural and urban locations as far as exclusion from pre-primary school attendance. Pre-primary school aged children who reside in rural areas have a non-attendance rate of 83.9% as compared to 48.5% in urban areas. That is, children of age 5 years who live in the rural areas have a non-attendance rate of about twice more than their peers from urban areas. The table below presents details of the findings of the country study.

Table 2.2: Percentage of Pre-primary School Age Children Out-of-school by Household Wealth, Area of residence and Region/ Zoba Characteristics

| | | Not Attending School | Attending Pre-primary School | Attending Primary School | Attending pre-primary or primary |
|-----------------------|------------|----------------------|------------------------------|--------------------------|----------------------------------|
| Residence | Rural | 83.92 | 15.80 | 0.28 | 16.08 |
| | Urban | 48.53 | 51.01 | 0.46 | 51.47 |
| Wealth Index Quintile | Poorest | 28.54 | 71.46 | 0.00 | 71.46 |
| | Second | 25.74 | 74.26 | 0.00 | 74.26 |
| | Middle | 19.15 | 80.85 | 0.00 | 80.85 |
| | Fourth | 8.75 | 91.25 | 0.00 | 91.25 |
| | Richest | 3.88 | 96.12 | 0.00 | 96.12 |
| | Anseba | 69.26 | 30.74 | 0.00 | 30.74 |
| | Debub | 77.38 | 22.62 | 0.00 | 22.62 |
| | DKB | 82.17 | 17.83 | 0.00 | 17.83 |
| | Gash Barka | 90.48 | 9.52 | 0.00 | 9.52 |
| | Maekel | 40.42 | 59.58 | 0.00 | 59.58 |
| | SKB | 85.86 | 14.14 | 0.00 | 14.14 |

Source: *out-of-School Children Country Study report, 2016.*

Information from the Regional Education Offices (REOs) report shows that the training of working force, as well as the quality of infrastructure and learning and play materials in the existing centers is negatively skewed.

Challenges:

- Low access for ECCE services, particularly remote rural areas and disadvantaged groups;
- Untrained and uncertified teachers with no formal remunerations;
- Poor learning environment affecting quality and outcome of service;
- Irregular in-service/capacity development training;
- New intervention scheme (annexing ECCE in primary school) requiring continuous upgrading, awareness raising and monitoring;
- Continuity of ECCE curriculum with primary curriculum not ascertained.

2.2.2 Primary Level

In the Eritrean education system, the primary level comprises grades 1-5 for children of 6 to 10 years of age. Mother tongue is the medium of instruction. As indicated in the educational policy of the GoSE, the main purpose of primary education is to build in children a firm foundation in

basic learning skills. The general objective of primary education is to have all children complete the cycle, while at least accomplishing minimum learning achievements as defined by the national curriculum framework.

The enrolment trend as presented in ESA 2016 indicates that sizable progress has been achieved over the years 2011/12 to 2014/15. During this period, gross enrolment steadily rose from 334,245 (boys 184,404, & girls 149,841) in 2011/12 to 361,684 (boys 197,898, and girls 163,786) in 2014/15. But it then showed a slight decline and reached 353,859 (boys 192,977, & girls 160,882) in 2015/16.

Table 2.3: Primary Level: Enrolment, GER and NER gender by year

| Year | Enrolment | | GER | | Net Enrolment | | NER | |
|---------|-----------|---------|-------|--------|---------------|---------|-------|--------|
| | Total | Female | Total | Female | Total | Female | Total | Female |
| 2011/12 | 334,245 | 149,841 | 99 | 93 | 259,345 | 118,227 | 76.8 | 73.4 |
| 2012/13 | 349,652 | 157,534 | 102.5 | 96.7 | 276,762 | 128,185 | 81.8 | 78.7 |
| 2013/14 | 361,604 | 162,984 | 103.1 | 97.2 | 286,457 | 132,863 | 81.7 | 79.2 |
| 2014/15 | 361,684 | 163,786 | 104.5 | 98.0 | 283,815 | 132,244 | 82.0 | 79.1 |
| 2015/16 | 353,859 | 160,882 | 106.7 | 100.6 | 272,188 | 127,347 | 82.1 | 79.5 |

Source: Eritrea, *Essential Education Indicators 2015/16*

As indicated in the table above, GER values for primary education showed an increasing trend from 99% in 2011/12 to 106.7% in 2015/16. The figure also shows that NER at the primary level has increased to 82.1% in 2015/16 when compared to 76.8% in 2011/12. It is very encouraging to see from the figure below that 82.1% of the Eritrean school aged children were enrolled in primary education in the academic year 2015/16. In addition, the figure revealed a sharp increase in enrolment in 2012/13 when compared to 2011/12. During those years MOE implemented the strategies stipulated in the ESDP and constructed and rehabilitated many schools, and this contributed to the rising trend. Basic education statistics 2012/13 shows that there were 875 primary schools in 2011/12, and the number of schools increased to 908 in 2012/13 academic year. In addition to this, 2012/13 was the academic year when the nomadic school program was launched in many parts of the country and contributed to the sharp increase in enrolment during that period.

In spite of this, yet there are critical issues and overriding concerns pertaining to equity of access to schooling throughout the country. Wider disparities in the general level of participation among regions/ Zobas, urban residences and children from nomadic communities and those living in geographically hard to reach rural areas is evident.

In some parts of the country especially in the eastern and western lowlands, the population lives in widely scattered remote areas and has been more challenging to extend access to all children in this area. In these areas, long distance from home to school remains a challenge for children specially girls. Moreover, many schools are operating under shades with no class room facilities

such as furniture. Besides, factors such as disabilities, poverty and cultural factors are reasons hindering participation of children in many schools. Geographical and gender disparities although improved, the gap is still wider in Regions of Dehubawi Keih Bahri (DKB), Semienawi Keih Bahri (SKB) and Gash Barka.

Analysis made based on Gross Enrollment and Completion Rates to depict disparities in general accessibility to primary education among regions indicate that in regions known to be domiciles of most of the nomadic and semi-nomadic communities', access becomes very low as compared to areas where there communities live in compact settlements. In DKB and SKB, accessibility to primary education drops by 35.7 and 29.4 percentage points from the national average.

This indicates that, there is wide-range of disparities in access to general education among the regions. Though investments in schools and classrooms has been an essential component of the MOE strategy to address the needs of the rapidly growing demand to education in the past decades, yet there is uneven progress in educational provision among the regions.

Findings of the OOSC country study clearly portrayed disparities in the exclusion rates by zoba, area of residence and household characteristics as indicated in the table below.

Table 2.4: Percent and Number of Primary School-age Children Out-of-School by Age, Gender, Residence, Wealth and Zoba

| Number of Out of School children | | Male | Female | Total |
|----------------------------------|---------------------|--------|--------|--------|
| | | 30,613 | 34,450 | 65,063 |
| % of out of School Children | | 17.06 | 21.14 | 19.00 |
| Age | 6 | 50.53 | 50.40 | 50.47 |
| | 7 | 9.68 | 11.98 | 10.78 |
| | 8 | 3.82 | 9.74 | 6.64 |
| | 9 | 5.14 | 9.81 | 7.36 |
| | 10 | 14.64 | 22.65 | 18.46 |
| Residence | Urban | 8.66 | 8.67 | 8.66 |
| | Rural | 18.04 | 28.73 | 23.25 |
| Wealth index Quintile | Poorest | 26.4 | 30.5 | 28.54 |
| | Second | 24.7 | 26.8 | 25.74 |
| | Middle | 18.1 | 20.2 | 19.15 |
| | Fourth | 7.8 | 9.7 | 8.75 |
| | Richest | 3.9 | 3.9 | 3.88 |
| Zoba | Anseba | 19.04 | 19.90 | 19.44 |
| | Dehub | 13.14 | 19.73 | 16.31 |
| | Dehubawi Keih Bahri | 19.86 | 29.87 | 24.87 |
| | Gash Barka | 26.77 | 28.09 | 27.39 |

| | | | | |
|----------------------------------|---------------------|--------|--------|--------|
| Number of Out of School children | | Male | Female | Total |
| | | 30,613 | 34,450 | 65,063 |
| | Maekel | 4.40 | 5.73 | 5.05 |
| | Semenawi Keih Bahri | 14.40 | 27.99 | 20.80 |

Source: OOSC Country Study report, 2016.

Identified major Challenges and gaps of Primary Education

- 19% of primary age school children are out of school;
- Many schools operate under community provided shades or tents;
- Shortage of competent teachers in mother tongue in some communities;
- Gender disparity specially in low land areas;
- Shortage/lack of classroom or school facilities;
- Low capacity of school management in mobilizing communities

2.2.3 Middle Level

Middle level is part of the basic education cycle in the Eritrean education system. Basic education is the minimum level of education which every individual must attain in order to function as a productive citizen in the country. Middle level education consists of 3 years of schooling from grade 6 up to grade 8 for the students 11 to 13 years of age. The medium of instruction at this level is English.

Table 2.3 shows enrolment trend, GER and NER, at the middle level for the period of 2011/12 to 2015/16. The table reveals that gross enrolment at this level showed a decreasing trend from 167,928 (boys 93,116, girls 74,812) in 2011/12 to 141,746 (boys 76,925, & girls 64,821) in the academic year 2015/16.

Table 2.5: Middle Level: Enrolment, GER and NER gender by year.

| Year | Enrolment | | GER | | Net Enrolment | | NER | |
|---------|-----------|--------|-------|--------|---------------|--------|-------|--------|
| | Total | Female | Total | Female | Total | Female | Total | Female |
| 2011/12 | 167,928 | 74,812 | 62.3 | 62.1 | 95,438 | 44,315 | 38.3 | 36.8 |
| 2012/13 | 155,526 | 68,970 | 69.5 | 64.3 | 65,621 | 31,178 | 29.3 | 29.1 |
| 2013/14 | 152,005 | 67,541 | 73.7 | 68.7 | 68,495 | 32,791 | 33.2 | 33.3 |
| 2014/15 | 147,031 | 66,149 | 76.6 | 72.4 | 72,560 | 35,047 | 37.8 | 38.4 |
| 2015/16 | 141,746 | 64,821 | 75.4 | 72.6 | 76,909 | 37,585 | 40.9 | 42.1 |

As indicated in the above table, values of GER at the middle level increased to 76.6% in 2014/15 when compared to 62.3% in 2011/12. However, this trend slight declined to reach 75.4% in 2015/16. The NER also portrayed a decreasing trend from 38.3% in 2011/12 to 29.3% in 2012/13. This decrease was mainly due to the change of the school age population from age 12-

14 to 11-13 in the middle level. But then the NER started to show a significant increase from 2013/14 and reached almost 41% in 2015/16.

Disparity analysis as presented in the ESA 2017 indicates that in DKB, SKB and Gash Barka the general accessibility to Middle level of education is lower than the national average by 35.7, 26.5 and 25.5 percentage points respectively. This indicates that there is a wide range of disparities in access to middle level education among regions. The proportion of out-of-school middle school age children in the disadvantaged Zobas such as Gash Barka, DKB and SKB is as high as 84.48%, 71.40% and 51.62% respectively. The percentages of middle school age out-of-school children in Anseba (39.4%) and Debub (21.25%) are smaller than the national average (40.88%), while the figure for Zoba Maekel markedly smaller (2.75%).

The out-of-School children study report -2016 using EMIS publication also depicted how area of residence, urban versus rural affects children's general access to middle level of education. The study indicated that the percentages of excluded middle school age children from rural areas (57.32%) are significantly higher than those from urban areas (10.60%). Rural children of lower secondary school age are nearly six times more likely to be out of school than their urban counterparts.

Table 2.6: Percent and number of Middle School-age Children out-of-school by Age, Gender, Residence, wealth and Zoba

| Number of Out of School children | | Male | Female | Total |
|----------------------------------|---------------------|--------|--------|--------|
| | | 42,913 | 48,497 | 91,410 |
| % of out of School Children | | 36.85 | 45.25 | 40.88 |
| Age | 11 | 31.76 | 38.30 | 34.88 |
| | 12 | 37.39 | 46.04 | 41.54 |
| | 13 | 40.74 | 50.42 | 45.40 |
| Residence | Rural | 52.47 | 62.58 | 57.32 |
| | Urban | 9.20 | 11.30 | 10.60 |
| Wealth index Quintile | Poorest | 80.55 | 88.45 | 84.25 |
| | Second | 59.99 | 65.59 | 62.79 |
| | Middle | 27.26 | 30.76 | 28.76 |
| | Fourth | 8.10 | 7.10 | 7.60 |
| | Richest | 3.57 | 3.57 | 3.57 |
| Zoba | Anseba | 36.95 | 42.31 | 39.48 |
| | Debub | 15.75 | 27.79 | 21.55 |
| | Debubawi Keih Bahri | 61.47 | 81.91 | 71.40 |
| | Gash Barka | 83.15 | 85.99 | 84.48 |
| | Maekel | 1.86 | 3.67 | 2.75 |
| | Semenawi Keih Bahri | 44.32 | 59.78 | 51.62 |

Source: OOSC Country Study report, 2016.

As indicated in the table above, the percentage of middle school age out-of-school female children (45.25%) overweighs that of their male counter parts (36.85%) significantly. Moreover, the overall middle school gender parity index (GPI) of 0.80 implies that girls are under-represented in middle school level.

Identified Challenges

- The gross enrolment at middle level showed a decreasing trend from 167,928 (boys 93,116, girls 74,812) in 2011/12 to 141,746 (boys 76,925, & girls 64,821) in the academic year 2015/16;
- Inadequate middle schools and shortage of qualified teachers appropriate to the level.

2.2.4 Secondary Level

Secondary level of education is perceived as a key stage to prepare learners for the world of work and further education through the provision of core, enrichment, and advanced placement subjects. Work-related practical studies with relevance to individual learner interests and national development needs are an integral part of the secondary education curriculum. On completion of secondary education, school leavers have the option of either seeking employment or pursuing further education and training in a less differentiated division between academic and vocational pathways.

Consequently, government efforts to expand general accessibility to secondary level of education in the last decade were encouraging. In the academic year 2015/2016 the total enrolment of children and youth in secondary schools was 87,664 of which 41,281(47.0%) was females. The number of secondary schools nationwide increased from 86 in 2010 to 104 in 2015/2016.

However, as indicated in the ESA 2017 Out of the total number of secondary school age children (324,120) more than half of them 52% (168,386) are excluded from school. Females are more prone to be out of school 57.5% (90,915) compared to their male counterparts 46.7% (77471) at this level of education. Furthermore, disparities among Zobas is noticeable and that the highest proportion of out of school children at this level of education are recorded in SKB (68.7%) followed by Gash Barka (64.5%). Exclusion from secondary level of education is also well substantiated by area of residence. The proportion of exclusion from secondary education in rural areas (70.5%) is much higher than those in urban areas (21.2%).

The GoSE believes that the development of a modern economy in Eritrea depends to a large extent on the supply of well-educated and trained secondary school graduates. This is clearly stated in its educational policy. Secondary education prepares learners for further education and/or for the world of work. Moreover, related practical studies, with relevance to the individual learner's interests and national development needs form an integral part of the secondary education curriculum.

There seems to be huge wastage along the educational level from elementary to secondary. According to the ESA of 2017, the education pyramid depicts only 16% of the number of students enrolled in first grade complete secondary education. That is, for each ten students who start in grade one only two complete secondary education.

In the rural areas the fact communities do not have access to conveniently located secondary schools appear to have been one of the major factors for many children to drop out after completion of basic education. Shortage of class rooms particularly in the urban areas forced for large class sizes and double shift system appear also to contribute to high attrition rate.

The supply of insufficient number of teachers, both in quantity and quality, has been repeatedly mentioned as an obstacle to school attendance in recent regional education reports. Teachers in the secondary level are considered professionally qualified if they have a minimum qualification of Bachelor degree (National Curriculum Framework 2009). However, teachers who fulfill the requirements of the MoE are only about 80 % out of who, again, not a small proportion are teaching in other than their field of specialization. Furthermore, it is revealed that no significant progress has been observed in the last five years in addressing this issue.

Challenges identified:

- Students low enrolment and high dropout rates;
- Shortage of class rooms particularly in the urban areas resulting very large class size;
- Shortage of professionally qualified and competent teachers;
- Big proportion of out of school children at this level;
- The supply of insufficient number of teachers, both in quantity and quality;
- Lack of awareness on the value of education in general and girls' education in particular;
- Shortage of knowledgeable and professional school leaders;

2.2.5 Technical Vocational Education and Training – TVET

Realizing the importance of TVET, the Government of the State of Eritrea has given top priority to the production of high-quality human capital which is highly trained and capable of mastering and exploiting available technology for socio-economic development of the country. The Macro-policy of the Government (GoSE, 1994: 40) states that the “emphasis of technical/vocational training will be imparting multi-craft dexterity and skills that enhance the job adaptability and retraining potential of the learner”. This calls for an effective Technical Vocational Education and Training system which can increase the pool of skilled and flexibly trained workers available for employment and self-employment in line with changing technological and national development needs. Technical Vocational Education and Training in Eritrea is offered by various ministries, non-governmental organizations, and private enterprises.

In 1996, the National Framework for TVET was drafted. This was the first draft policy document on skill development in Eritrea. This document provides significant guidance to the development of TVET since 1996. This National Framework, structured TVET sub-sector in three levels.

- i) Basic level: for primary and middle secondary graduates, lasting 6-12 months with a maximum of 20% theory and 80% practical;
- ii) Intermediate level: for those who completed grade 10, lasting 2 years of academic and TVET courses including 1-2 months of industrial training with 30% - 40% theory and 60% - 70% of practice and
- iii) Advanced level: for those who completed senior secondary school have got passing mark in ESLCE, lasting 2 to 3 years with 30% practice and 70% theory.

Between 1996 and 1998, four skill development centers, two technical schools, two agricultural schools at intermediate levels and two institutes at advanced level were established. In 2004 one intermediate level was opened in Massawa to provide course relevant to coastal area activities. In 2006, the Massawa Technical and Commercial school was up-graded to College of Marine and Aquatic Science and the Hamelmalo Agricultural School to Hamelmalo Agricultural College.

In the course of time, with the ever-pressing need of equipping a large number of youth with marketable skills the number of TVET training centers, and their geographic coverage as well as their management showed some progress. The formal technical and vocational training centers grew up to 9 in number, located in four Zobas of the country, namely: (i) Wina Technical School; (ii) Asmara Technical School; (iii) Mai Habar Technical School; (iv) Halay Technical School; (v) Don Bosco Technical School; (vi) Denden Commercial school; (vii) Hagaz Agro-Technical School; (viii) Music School; and (ix) the Center for Vocational Training (CeVoT). The latter was established in 2007 in Sawa. In addition, different private non-formal technical and vocational training centers have been established.

To realize the objective of developing skilled human capital the Ministry of Education (MoE) in 2009 designed these strategies: developing organizational and managerial capacity to ensure demand orientation and more effective service delivery; building the quality of the TVET system for achieving more effective mastery of skills and competencies; broadening the coverage and expanding the quantitative output of trained manpower (that includes technology-related training, development of non-formal skills and training for the informal sector) to meet economic requirements.

The TVET sub-sector in Eritrea aims to produce skilled people at basic and intermediate level in order to meet the demand for labor and improve productivity. Access in TVET implies the opportunity to provide technical and vocational education and training to citizens regardless of socio-economic status, gender and nationality.

Access to TVET schools is limited and enrolments in TVET schools comprise only 5 percent of total enrolment of secondary level. MOE has a long term plan to increase enrollment in the Intermediate Level from existing 5% to 20%. This could be realized by expanding the existing Technical schools and constructing new TVET institutions. In addition, evening class will be opened to provide access for those who have no the chance in the day programs.

Ensuring sufficient training centers for large number of target groups in different zobas is one of the pre-requisites for developing an equitable TVET system. The location of TVET schools is unequally distributed across the zobas. There is in inequity and enrolment patterns show disparities by gender and location. However, gender disparities were gradually reduced to 44.4 percent in 2013/14 to 46.2 percent in 2017/18.

The Table below illustrates the enrollment ratio of TVET in comparison to grade 10 students in secondary schools in general education stream within four years of time (2013/14-2017/18).

Table 2.7: Intake of TVET compared to grade 10 students in secondary schools.

| Students Population | 2013/14 | | 2014/15 | | 2015/16 | | 2016/17 | | 2017/2018 | |
|--|---------|-------|---------|-------|---------|-------|---------|-------|-----------|--------|
| | F | Total | F | Total | F | Total | F | Total | F | Total |
| Grade 10 students from General Education | 10024 | 24188 | 17049 | 37591 | 13528 | 30056 | 11877 | 24912 | 12,841 | 26,560 |
| Enrolled in to TVET schools | 624 | 1404 | 759 | 1594 | 668 | 1408 | 664 | 1471 | 609 | 1402 |
| % of intake in TVET | | 5.8 | | 4.2 | | 4.7 | | 5.9 | | 5.3 |
| %of Females in TVET | 44.4 | | 47.6 | | 47.4 | | 46.2 | | 43.4 | |

Table 2.7 indicates that enrollment rate is constant. This is due to the limitation of space and capacity of TVET schools. The rate of Female enrollment also shows slight increment from 44.4% in 2013/14 to 46.2% in 2016/17. The reason might be the greater opportunity which females have of performing well and surviving in secondary school and better meet the selection criteria.

Though enrollment is only 5% of total enrolment in secondary level, Eritrea`s TVET not a “second choice” alternative to an academic education as is the trend seen in other countries. For example, Intermediate Level TVET has been receiving the academically best students from grade 10, creaming off students from their feeder secondary schools. However, since 2006, entrance procedures have changed to give students of more average academic performance as an opportunity to enroll to Intermediate Level TVET, under the assumption that these students will opt more for the labor market, than university, after completing technical schools. This policy of admission could also bring equitability in access in the schools. Consequently, Intermediate Level enrollment has shown a gradual increase since 2013/14 and reaches to 7368 in 2017/18 (See the Table below).

Table 2.8: TVET Intermediate Enrollment by Stream

| Stream | Years | | | | | | | | | | | |
|-------------------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|
| | 2013/14 | | 2014/15 | | 2015/16 | | 2016/17 | | 2017/18 | | Total | |
| | F | T | F | T | F | T | F | T | F | T | F | T |
| Technical | 300 | 849 | 267 | 849 | 300 | 833 | 261 | 835 | 323 | 853 | 1451 | 4219 |
| Commercial | 287 | 448 | 420 | 576 | 321 | 451 | 318 | 483 | 317 | 491 | 1663 | 2449 |
| Agriculture | 37 | 107 | 72 | 169 | 47 | 124 | 69 | 153 | 62 | 147 | 287 | 700 |
| G Total | 624 | 1404 | 759 | 1594 | 668 | 1408 | 648 | 1471 | 702 | 1491 | 3401 | 7368 |
| Percentage | 44.4 | | 47.6 | | 47.4 | | 44.1 | | 47.1 | | 46.2 | |

As in the case of CeVot, the Center was established to accommodate students who complete secondary educational level and achieve certificate result in the Eritrean Secondary School Leaving Certificate Examination (ESLCE). CeVoT has a capacity to enroll thousands of students from different Zobas and varied ethnicity - Table 2.9.

Table 2.9: CeVoT Enrolment trend by center

| Centres | 2012-2013(6 th) | | | 2014-2015(7 th) | | | 2016-2017(8 th) | | | Grand Total | | |
|------------------------|-----------------|------|------|-----------------|------|------|-----------------|------|-----|-------------|------|------|
| | M | F | T | M | F | T | M | F | T | M | F | T |
| Business and Commerce | 194 | 669 | 863 | 141 | 1057 | 1198 | 38 | 210 | 248 | 373 | 1936 | 2309 |
| Building Technology 01 | 322 | 101 | 423 | 658 | 115 | 773 | 190 | 205 | 395 | 1170 | 421 | 1591 |
| Building Technology 02 | 317 | 39 | 356 | 523 | 70 | 593 | 189 | 139 | 328 | 1029 | 248 | 1277 |
| Agricultural | 88 | 33 | 121 | | | | | | | 88 | 33 | 121 |
| Heavy Machinery | 439 | 14 | 453 | 514 | 83 | 597 | | | | 953 | 97 | 1050 |
| Grand Total | 1561 | 1010 | 2571 | 2070 | 1350 | 3420 | 417 | 554 | 971 | 4048 | 2914 | 6962 |
| Percentage of Females | | 39.3 | | | 39.5 | | | 57.1 | | | 41.9 | |

To ensure the equity in the participation of females in the TVET institutions, the MOE is following the policy of positive discrimination. Accordingly, the enrollment of females has increased steadily and in the academic year 2013/14 to 2017/18, females accounted for almost half of the new entrants. The gender gap in enrolment is declined with female enrolment reaching up to 46.2% in the year 2017/18. In the technical stream they are 34.4% and in the agriculture 8.2%. Female enrolment in the CeVoT has increased to 41.9% in 2017/18 from its low level of 41.9% in 2013/14. High female participation implies the reduction of stereotypes in the so called ‘male’ dominated trades. Nonetheless, there is disparity in the distribution along ethnic lines, where the Tigigna ethnic group, with 78.1% in Technical, 90.4% in Commercial

and 67.4% in Agricultural streams, dominate enrolment. This is despite the open and fair admission policy.

To reduce this inequality to access, the MOE established Skill Development Centers (SDCs) in selected areas of disadvantaged regions. In addition to this, the MOE also follows the policy of positive discrimination in the selection procedure by reserving 35% of the total entrants to disadvantaged ethnic groups. Furthermore, the disadvantaged ethnic groups are enrolled free of charge in TVET schools with boarding facilities. As a result, 40 – 50% of the enrollments at these schools are from the educationally disadvantaged and previously forgotten ethnic groups.

The quality of the training offered is negatively affected by multiple factors including, depreciated and inadequate equipment facilities, shortage of training tools and materials and shortage of qualified Technical instructors as well as dilapidated infrastructure.

The TVET system is characterized by low enrollment rates, high unit costs, limited infrastructure and internal inefficiencies as well as inequalities regarding access to these institutions. The enrollment figures are the lowest in the country with only 5% of the overall student population of 10th grade of the secondary education.

The demand of students to TVET is very high and there are challenges to be able to meet the demand. Yet, TVET expenditure account for the lowest share of the total public education expenditure in the year of 2015.

Challenges identified in TVET

- Access to TVET schools is limited as there are few vocational schools.
- There is still disparity in Gender, Ethnicity and Location of TVET schools
- The TVET schools are running at poor condition with depreciated equipment, dilapidated construction, not standardized curriculum and certification system.
- Shortage of qualified work force in schools (technical instructors, administrators and managers).
- Shortage of qualified personnel in the central office (curriculum developers, supervisors, database managers, programmers and project management experts)
- TVET Qualification Framework is not in place yet.
- Lack of labor Market information system
- Weak database system
- Weak linkage with line ministries and stakeholders
- Insufficient budget
- Lack of TVET instructors' training institution

2.2.6 Adult and Non-Formal Education

In the Eritrean context adult and non-formal education (ANFE) is defined as a second chance education to those children and adults who were unable to follow formal education at the appropriate age. As part of the provision of the adult and non-formal education, the emphasis given has been to literacy activities for out of school population. The need of promoting quality literacy and continuing education so as to lay solid foundation for further education and trainings has been a priority and is well elaborated and reflected in different developmental and educational documents of the country.

More importantly a national policy on adult and NFE has been in place since 2005. The policy includes important policy statements and definitions to guide and direct the implementation of ANFE including literacy.

The Eritrean Adult and Non-Formal Education serve multiple purposes. For those who were unable to go to school, it can provide basic education. For those who were unable to complete their schooling, it offers second chance to access routes to further education or to acquire specific skills relevant to the learners' field of need or interest. Adult and non-formal education also enables individuals to continue learning throughout their lives, regardless of whether they have gone to school or acquired a qualification.

The ANFE is conceived as a comprehensive sub-sector, and is composed of literacy and post literacy programs which are equivalent and complementary to the formal system. The national Adult Education Programme currently consists of 3 components (NPAAE, 2013):

- Youth and adult literacy and post literacy;
- Continuing education, including vocational training and life-skills acquisition, for youth and adults (15 plus); as well as
- Complementary primary education for out-of-school children (CEE) for 9 – 14 years-olds.

One of the important measures of educational success is accessibility. In the last 10 year (since 2008) a total of 364,697 adults (of which 323,436 women) were registered at the learning centers of adult literacy programmes. This large number of enrolment will definitely have an impact on the increase of literacy rate in the country.

Table 2.10: Literacy Enrolment Trends 2010-2016

| Year | Registered | | | Drop outs | | | Completers | | |
|-------|------------|--------|-------|-----------|--------|-------|------------|--------|-------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 09/10 | 3550 | 36639 | 40189 | 887 | 7903 | 8790 | 2663 | 28736 | 31399 |
| 10/11 | 5297 | 40828 | 46125 | 1241 | 9664 | 10905 | 4056 | 31164 | 35220 |
| 11/12 | 4255 | 47449 | 51704 | 1518 | 10406 | 11924 | 2737 | 37043 | 39780 |
| 12/13 | 5529 | 41216 | 46743 | 1673 | 9735 | 11408 | 3856 | 31481 | 35337 |
| 13/14 | 9387 | 45831 | 55218 | 2261 | 6904 | 9165 | 7126 | 38927 | 46053 |
| 14/15 | 4247 | 35222 | 39469 | 1090 | 8913 | 10003 | 3157 | 26309 | 29466 |
| 15/16 | 4915 | 33502 | 38417 | 1471 | 7924 | 9395 | 3444 | 25578 | 29022 |

If we look at the share of enrollment by zoba as indicated in the table above, the majority of literacy participants were from the 4 disadvantaged zobas (Anseba, Semenawi Keih Bahri, Debubawi Keih Bahri and Gash Barka) which is 89%. More importantly, literacy enrolment has been higher in zoba Gash Barka than the other zobas in the past 5 years. For instance, in the 2015/16 academic year 44.2 % of those enrolled were from zoba Gash Barka and second 26.5 % from zob Semenawi Keih Bahri. This is an encouraging move considering that zoba Gash Barka was listed as the bottom in the order of the illiteracy rate status of the 2008 literacy survey findings (with 61% illiteracy rate).

The equity issue is strategically addressed in the provision of adult literacy in Eritrea. To this end, most literacy participants are from the disadvantaged areas of the country. Besides, the program is delivered in all nine local languages at the basic literacy. The table below shows the participation of ethnic groups in adult literacy in the past 5 years. As indicated in the table, learners from all the 9 ethnic groups attended in the literacy program.

Table 2.11: Participation in Literacy Programme by Ethnicity

| Academic year | Ethnic Groups | | | | | | | | | Total |
|---------------|---------------|-------|-------|--------|------|------|------|---------|----------|-------|
| | Tigrigna | Tigre | Bilen | Kunama | Nara | Saho | Afar | Hidareb | Rashaida | |
| 2011/12 | 14620 | 22699 | 1669 | 1505 | 3554 | 4040 | 2431 | 1147 | 39 | 51704 |
| 2012/13 | 9808 | 24650 | 1224 | 1274 | 3660 | 3090 | 2758 | 1145 | 17 | 46743 |
| 2013/14 | 17079 | 26688 | 1309 | 1613 | 4052 | 1281 | 2133 | 1064 | - | 55218 |
| 2014/15 | 7197 | 21209 | 722 | 477 | 2592 | 2720 | 2833 | 1712 | 7 | 39469 |
| 2015/16 | 6573 | 20365 | 557 | 1304 | 3239 | 2110 | 2946 | 1290 | 33 | 38417 |

One other component of the Adult and Non-formal education program is the complementary elementary program. This program caters the educational needs of out of school children of the age range 9 to 14 years of age. In the year 2006, it was agreed that the program to be officially

launched to provide its educational provision in the disadvantaged Zobas, namely, SKB, DKB, Anseba and Gash Barka. Its purposes have been to:

- Provide an equivalent package of basic education to children of ages 9-14 who missed education;
- Mainstream the out-of-school-children into appropriate levels in the formal school system or into apprenticeship or TVET depending on their age, capacity and interest and
- Provide further guidance to ensure that they remain in the school system, get into technical and vocational education or any organized apprenticeship.

The total numbers of learners, who have been enrolled in CEE program, since its inception in 2006, were 28,070 out of which 12,698 were females (45.2 %). In Anseba region, in the last 5 years, the total number of over aged out of school children enrolled in the last 5 years (2011-2016) were 7795 of which 3423 were females. The enrolment trend of the latter five academic years has showed a decreasing trend in a rise and fall pace. This is mainly because some learning centers phased out as older out of school children are reached through this program. Similarly, in Gash Barka, SKB and DKB enrolment trends declined as the number of CEE centers phased out and turned to be part of the formal nomadic education provisions.

Challenges

- Illiteracy is still high (about 20%) in many parts (villages) of the country and many overage children are out of school;
- Challenge of sustaining literacy skills acquired in learning centers (risk of regressing into illiteracy);
- High literacy disparity by gender and geographical areas (administrative zobas, rural and urban);
- Limited human capacity to manage quality literacy and continuing education programs effectively throughout the country. Acute shortage of skilled manpower in teaching, supervising, co-coordinating and management of adult education programs at all levels
- Unqualified and untrained literacy and CEE teachers especially those recruited from the community
- Lack of adequate and regular monitoring and follow-ups.
- High dropout in adult education programs including CEE and continuing education
- Low male participation in adult literacy program and low female participation in CEE and continuing education
- Very limited access and poor quality of continuing education programs (non-formal middle and secondary education)

- Very limited and less effective community reading rooms(due to lack of adequate reading materials, furniture and venue)

Complementary Elementary Education (CEE) for out of School Children

Complementary Elementary Education(CEE) for out of school children is a government program managed as part of the adult literacy and post-literacy program in the country. It started as a joint work in 2006/07 between the MOE and UNICEF at national level and implemented in 4 disadvantaged zobas namely, Gash-Barka, Anseba, Semeinawi Keih Bahri and Dehubawi Kehie Bahri. The main target groups are disadvantaged boys and girls 9-14 years old.

This alternative strategy of education provision is defined as: a three-year course equivalent to five years of elementary school; aimed at providing out-of-school boys and girls with the necessary skills and knowledge that will allow mainstreaming for those that are eligible into the formal education at the junior level, or access to vocational training. Many boys and girls benefited from this alternative education. For instance in 2015/16 academic year total 7256 children enrolled in 107 learning centers supported by 427 teachers. In terms of participation by sex about 45 percent were girls. As to the source of teachers, 34 percent were from the community and the remaining formal school. Generally in the past 5 years (2011- 2016) about 28,000 children (45 percent girls) enrolled at the first level and more than 1800 joined the formal system at junior level since 2009/10 academic year. This is really an encouraging progress and must be enhanced and maintained to address the large number of out of school children in the country.

Continuing Education

Continuing education is an area of adult education provision that needs serious attention. Currently, this activity is almost synonymous to evening extension program which is pure academic and is mostly taking place at night. However continuing education is needed to be provided in a varied education and training courses as well at any convenient time to meet learners needs and conditions. To date, the impact of continuing education programs have been very limited. If we took the statistical data of evening programs of 2015/16academic year for instance, total enrolment of the two levels was 25,677 (middle **12388** and secondary **13289**). Female participation was only 28 percent at middle level and 22 percent at secondary. Evening program is currently executed using the formal education resources (curriculum, teachers, administration, and school premises). Effort will therefore be made to enhance and expand the provision of continuing education) be it academic courses or vocational skills trainings) to sustain literacy and post literacy achievements in the country

Community Reading Rooms

Community reading rooms are planned and managed as part and parcel of the adult education programs to enhance literacy skills acquire at literacy centers and to cultivate habit of reading among the population. Currently, there about 90 reading rooms in six zobas majority of which are located in three zobas (Maekel, Debub and Anseba). The community Reading rooms have books on health, agriculture, environment, history, fictions, news-papers and magazines in general. Generally all the community reading rooms have shortage of reading books in local languages and are inconvenient in terms of infrastructure(in huts, tents, rent houses etc). This is an important initiative towards the long vision of creating literate environment and lifelong learning opportunities. They are an important source of information for learners and for a given community at large.

Objectives

- To create literate environment.
- Develop and encourage in dependent and lifelong learning
- Support the literacy program
- Create information centers in remote villages and support new literates to get up to date information.
- To increase community awareness on health related issue
- Support mothers and other interested individuals get information and knowledge on reproductive health and other life skills related issue.

Goals of the Adult and Non-Formal Education

1. Reinforcing literacy implementation for out of school children, youth and adults focusing on disadvantaged areas and section of the society
2. Sustaining and enhancing literacy achievements by providing effective continuing education programs in rural and urban areas
3. Creating literate environment by opening well equipped community reading rooms(with varied supplementary reading materials)
4. Providing professional and material support for the adult education providers outside the MOE
5. Develop institutional capacity to deliver effective and quality adult and non-formal education programs.
6. Enhancing monitoring and supervision to ensure provision of quality adult and non-formal education
7. Establishing effective collaboration and partnership with stakeholders and partners in planning and implementing adult education and no-formal education programs;
8. Raising and sustaining public awareness to enhance participation and enrolment;
9. Establish adult education information network and data base (as part of EMIS)

Strategies

1. Diversifying the implementation of basic literacy and post literacy education for adults and out of school children. Designing and implementing innovative and flexible learning opportunities in collaboration with partners;
2. Development of appropriate and relevant continuing education programs to sustain basic literacy education achievements
3. Building capacities of literacy facilitators and adult educators and program developers and coordinators through effective training methods and adequate remuneration schemes;
4. Create literate environment by increasing the number of community reading rooms, and further developing them into community learning centres (CLCs), by furnishing relevant learning material and enhancing the profile of librarians
5. Establish bridging and equivalent programs to allow legible adult and children learners join formal education to pursue further learning;
6. Conduct regular awareness raising and consultation meetings at different levels on the importance literacy and continuing education program for adults and out of school children.
7. Introducing ICTs-based and learner-centred approaches that will help to improve the quality of teaching/learning processes and reach out to larger groups of the population, particularly in remote areas
8. Establish ANFE data base by developing disaggregated data collection systems to identify disadvantaged groups and gender disparities, and to target them for participation and progress in learning;

2.3 Quality and Relevance

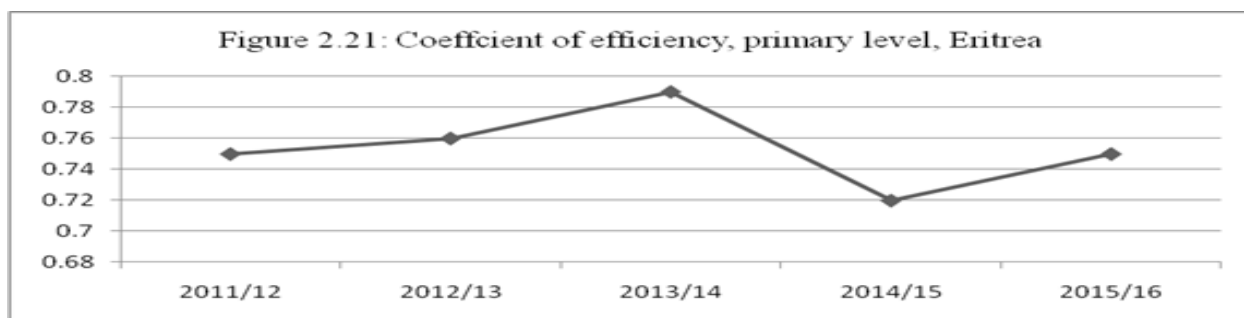
The second theme identified in the Eritrea's ESP relates to quality and relevance, as targeted outcomes of the education sector. The focus here is on the quality of learning and its relevance, as well as the effectiveness and efficiency in the way education is delivered.

The Government of the State of Eritrea (GoSE) believes that investment in early childhood care and education is directly related to the promotion of child rights, poverty alleviation, sustainable human resource development, Basic Education for All, and Health for All. Hence, much attention was devoted to the subject of early child care and education (ECCE) for young children, and special emphasis was given on the disadvantaged areas and population groups. Consequently, the government has taken initiatives to develop Early Learning and Development Standards (ELDS) to guide the delivery of quality services in ECCE centers nationwide. There is a theme based ECCE curriculum for both year 1 (KG 1) and 2 (KG 2) and is devised in a way to enhance active participation of parents and communities. The development domains, which include physical, social-emotional, intellectual, language, moral and cultural, are given much

attention. Its learning principle is based on concrete, experiential ways, rather than through abstract and mediated processes.

The ELDS study conducted in 2011 to assess the impact of ECCE intervention revealed a significant achievement of in-school children (80.64%) over out-of-school children (53.91%) in most of the development domains. This indicates that preschool experiences have a great impact on child's holistic development. However, the monitoring and supervision of the sub-sector and the provision of regular hands-on support is greatly affected due to high turnover and lack specialized supervisors.

In Primary level the internal efficiency coefficient was constructed based on actual flow rates for respective academic years (ESA 2017). The computation made for the academic year 2015/2016 indicated that the IEC is 75%. This implies that 25% of public resources are used for repeated years or for school years of students who are dropping out before completing the cycle. The trend analysis also discloses that there were inconsistencies and irregularities over the years 2011 to 2016.



Source: MoE; *Essential Education Indicators, 2011/12-2015/16*

Indeed, the system requires 6.7 student-years to produce one graduate instead of 5 years with a perfect efficiency. An increase in repetition is mainly responsible for this degradation and the related rise in wasted resources.

The Ministry of Education has undertaken initiatives to measure the quality of education services. Among others the Eritrea National Reading Survey (ENRS) and Monitoring Learning Achievement (MLA) could be cited. The MLA assessment surveys focused on basic learning competencies in the domains of literacy and numeracy and as of now three surveys were conducted, MLA-I in 2001, MLA-II in 2008 and MLA-III in 2015. The data collected has been utilized to identify factors that promote or hinder learning in primary schools, analyze problem areas, inform policies and design interventions to improve the quality of education. In this project the performance of grade 3 and 5 students is in mother tongue, English language and Mathematics is assessed and background information that may affect students learning collected and analyzed.

In the MLA studies, the performance on MML and DML and mean score achievements are analyzed in three learning areas (English, Mother Tongue, and Mathematics). These were investigated by Region/ Zoba, Medium of Instruction (learning language), Gender, Area of Residence, and School Type. Minimum Mastery Level (MML), is the performance target that requires 80% of learners to attain 50 percent or above on minimum learning competencies. In terms of individual student performance, it refers to the minimum score that a student in a given grade is expected to achieve if he/she has attended school and acquired skills and competencies expected for that grade. Similarly, for the Desired Mastery Level (DML), at least 50% of the students should achieve or surpass 70% of the total score.

Based on the findings of these studies and the trends analysis, there are concerns within government and among the public about the quality of education. The sector continues to register low achievement rates among children across all grades. The 2015 national assessment to Monitor Learning Achievement (MLA III) revealed declining performance at Grade 5 where only 25.4% of students attained the minimum mastery level (MML) compared to 49.9% in 2008. In MLA-III, the percentage of grade 3 students who attained MML in the literacy learning domains is better in vocabulary with scores for male 63.9 and female 63.4. However, the benchmark for MML had not been met after 3 years of schooling in reading and writing competences and over 50% of students were below average.

Disparities in learning achievement among rural and urban residences and among regions are wide. Generally, the MML benchmark has not been reached in both Rural and Urban schools and the gap of learning achievements between urban and rural 5th grade students in Mother Tongue was found to be 22.5 percentage points (parity index = 0.62). In mathematics, the percentage of students who attained the MML score was very low in both urban and rural. However, the disparity is slightly narrower in Mathematics than in Mother Tongue. The parity index of rural over urban percentages (9.6/14.7) is equal to 0.65, which is not far from that of Mother Tongue.

Table 2.12: Proportion of students attained MML in MLA I, MLA II and MLA III

| Grades | Subjects | MLA-I 2001 | MLA-II 2008 | MLA-III 2015 |
|--------|---------------|------------|-------------|--------------|
| 3 | Mother Tongue | 72.8 | 73.3 | 44.5 |
| | Mathematics | 42.2 | 14.1 | 24.5 |
| | English | 58.2 | 54.8 | 21.3 |
| 5 | Mother Tongue | 73.3 | 62.0 | 44.2 |
| | Mathematics | 14.1 | 20.7 | 11.3 |
| | English | 54.8 | 67.2 | 20.8 |

As indicated in the table above, in all the MLA assessments conducted the MML benchmark has not been met and among the subjects assessed, students did poorly in Mathematics. This could be partly attributed to inadequate early learning opportunities and low teacher coverage, which is aggravated by teacher attrition. MoE with support from development partners will address this,

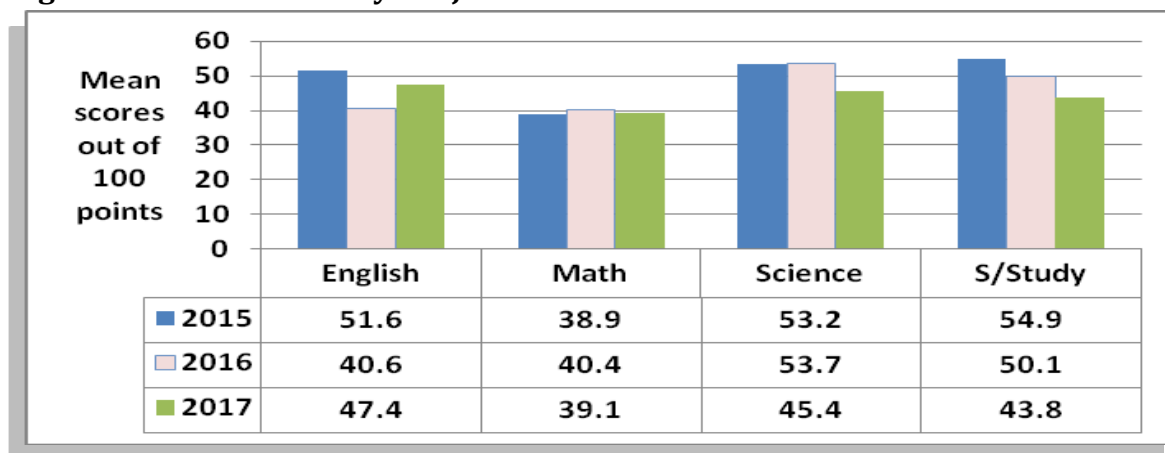
specifically with regard to teacher training and professional development, and strengthening early learning opportunities as a head start advantages it offers for school readiness.

Eritrea has not yet participated in any other internationally or regionally recognized assessment programs. However, the Ministry of Education recognizes the importance of participating in such regional and/or international standardized learning assessments such as Southern Africa Consortium for Monitoring the Education Quality (SACMEQ) in order to gauge the quality and standard of Eritrea’s education system against regionally recognized benchmarks.

In the Eritrean education system, two National Examinations are administered at two exit points: one at grade eight level, the last grade of the basic education cycle and second at grade 12 level, the last grade of the secondary education cycle. The national examinations serve multiple purposes, which includes appraise the quality of education services, certification of completion of a specified level of education, and permit admission to the next level of education.

Data from the last three years of the Grade 8 National Examinations, reveals that the pass rate in 2017 (51.9%) is much lower than that of 2015 (69.8%). In the last three years (2015-2017) the mean scores for the four subject areas tested (English, Math, Science and Social studies) has never reached 55% and the highest mean-score, 54.9%, is recorded in 2015 in social studies; and the lowest mean score, 38.5%, is in mathematics in 2015. Overall, the lowest mean-scores in the 3-years were that of mathematics, ranging from 38.5% to 40.4%.

Figure 2.2 Mean scores by Subjects Tested and Examination Years.



Besides, the benchmark for MML had not been reached in any of the examination years though, disparity between male and female is insignificant (parity index of 0.93, in 2016) across the years and relatively males performed slightly better than females.

The MML scores in literacy (English) and Numeracy (Mathematics) from the past three years (2015, 2016, and 2017) of the End-of-Basic Education National examinations in Grade 8, in both literacy and numeracy, has indicated that students examined at their appropriate age level (≤ 14 years) performed relatively better than the older age groups.

Realizing the importance of TVET, the Government of the State of Eritrea has given top priority to the production of high-quality human capital which is highly trained and capable of mastering and exploiting available technology for socio-economic development of the country.

The quality of training varies from one school to another. As a result, the competencies of graduates differ widely from one institution to the other, because assessment is left up to the discretion of each school. Although some of the institutions provide very good training still quality standards need to be raised. However, a uniform standard is lacking, because external assessment of graduates does not take place annually; except for the two studies done - the tracer study by Wekita (2015) and the analytic study of external efficiency of Denden Commercial School graduates (2016).

As in the case of relevance, tracer survey conducted on TVET Graduates and Employer Enterprises (WEKITA, 2015: pp. 76) and a case study was made by Daniel J. (2017: pp.48) were good indication to evaluate the degree of relevance of TVET training delivery in the labor market. The results of the studies confirm that skills acquired at TVET schools both in content and their placement was relevant to the present job the graduates that are employed both in public and private business enterprises. The reports also indicates that almost all (94.7%) of the graduates are employed and yet predominately being employed by the public sector. Yet, 55% of the graduate respondents reported that skills acquired are adequate. On the side of the employer, as the report documented, most of the employers believe that the courses offered at the TVET schools are at best 'fair' and there is a wide room for improvement. Most do have a short term plan to recruit TVET graduates or even they would be glad if they were to get new TVET graduates.

2.4 System Capacity and Management

The capacity of MOE at all levels of the education sector to deliver quality educational services is comparatively limited. The limitations pertain to organization, staffing systems and procedures. The MOE has devolved many functions to the zobas, including managing, administering and supporting basic and secondary schools. This has placed additional responsibilities on the zobas without commensurate staffing resources, particularly of managerial and administrative staff. The MOE itself has seriously tackled its functions of planning, policy making, monitoring and regulating the educational system. However, MOE staffing appears to be inadequate in key functions. Skills of staff may also be inadequate. In addition, functions in the MOE could be distributed better to eliminate overlapping between Departments. Inadequate management systems are other issues, including lack of modern financial management, budgeting, expenditure reporting and comprehensive databases. Corresponding equipment and logistical procedures are also inadequate. These problems result in slow and inefficient delivery of services to the schools.

It is clear that SDG-4 goals cannot be reached without substantial increases in resources to education and training. One way would be for the Government to increase markedly its spending on education. However, the ability to mobilize sufficient domestic funds to finance the provision of learning opportunity to all citizens is limited. The participation of various development partners to broaden financial resources for education has also been limited. Little cost sharing occurs with the private sector. Eritrea has low levels of non-government provided education at all levels. As a result, the Government has had to shoulder virtually all of the provision of education and training.

Several factors like the skills and performance of the staff, appropriateness of the administrative structures, functioning of the public administration, economic and social contexts are worth to be analyzed if the sector analysis is to be complete and comprehensive. It is to be recalled that the Ministry had conducted a survey and analyzed its institutional capacity in the year 2005 (MOE Capacity Assessment, 2005) which serves the Ministry as a baseline. The Ministry strongly believes such an analysis would enable to identify its strengths, weaknesses and gaps, and thereby ensures better performances of its administrative structures and personnel. However, due to the unavailability of recent sufficient data no in-depth analysis has been conducted since 2005. Hence, the MoE commits itself to undertake an extensive and in-depth institutional capacity assessment in the near future.

2.4.1 Organization Structure and Decentralization

The organization structure of the MOE is composed of the Minister's Office, five Departments and six Regional education offices. The five departments are: (1) Department of General Education, (2) Department of Adult Education and Media, (3) Department of Technical and Vocational Education and Training, (4) Department of Research and Human Resources Development and (5) Department of Administration and Finance.

Within the decentralized structure of the regional administrations, the MOE central office is responsible for Education policy formulation, Education Sector Planning and Development, Curriculum development, Human capacity development, setting standards, Monitoring and Evaluation. Zoba Education Offices are responsible for overall administration and management of the education sector in their respective Zobas, except for TVET sub-sector and Teacher Training Institutes, which are managed centrally. The school management, together with the Parent Teacher Student Associations (PTSAs), are responsible for the overall school management and school development programs.

2.4.2 Performance of Administrative Structures

The central office of the MoE shoulders an immense responsibility of planning, coordinating, implementing and regulating the overall educational matters of the state. As indicated in table 1.10 below, even though there is disparity in the placement of the skilled manpower among the

departments, out of the 490 staff in the central office, only 200 (40.8 %) have Bachelors degree and above. This indicates that there is a need for extensive professional capacity development programs to be undertaken to enhance the efficiency and effectiveness of management and operations staff of the MoE at all levels.

Table 2.13: Profile of manpower by qualification - MOE Central Office

| Department | Total Staff | Under 12 | 12 | 12+1 | 12+2 | 12+3 | 12+4 | 12+5 | M.A/MSc | Ph.D. |
|---|-------------|----------|----|------|------|------|------|------|---------|-------|
| Administration and Finance | 186 | 55 | | 38 | 43 | 4 | 28 | 7 | 2 | 0 |
| Research and Human Resource Development | 30 | 0 | | 2 | 5 | 1 | 6 | 1 | 15 | 0 |
| General Education | 84 | 9 | | 9 | 9 | 2 | 14 | 0 | 41 | 0 |
| Technical Education and Vocational Training | 19 | 0 | | 2 | 2 | 0 | 6 | 1 | 8 | 0 |
| Adult and Media Education | 49 | 6 | | 10 | 15 | 1 | 11 | 0 | 6 | 0 |

Source: HRM-MoE

Table 2.14: Profile of manpower by qualification in Zoba Education Offices

| Zoba | Total Staff | Under 12 | 12+1 | 12+2 | 12+3 | 12+4 | 12+5 | M.A/MSc. | Ph.D. |
|------------|-------------|----------|------|------|------|------|------|----------|-------|
| Anseba | 2707 | 470 | 1205 | 704 | 69 | 237 | 13 | 9 | 0 |
| Debub | 5786 | 638 | 2466 | 1452 | 91 | 1105 | 28 | 6 | 0 |
| DKB | 544 | 86 | 242 | 149 | 4 | 58 | 4 | 1 | 0 |
| Gash Barka | 3674 | 609 | 1705 | 899 | 86 | 358 | 16 | 1 | 0 |
| Maekel | 4079 | 362 | 1265 | 1555 | 131 | 730 | 21 | 15 | 0 |
| SKB | 2155 | 359 | 1103 | 468 | 30 | 184 | 10 | 1 | 0 |
| TVET | 298 | 0 | 76 | 66 | 35 | 98 | 21 | 3 | |
| Total | 19243 | 2524 | 8062 | 5293 | 446 | 2770 | 113 | 36 | 0 |

Source: HRM MoE

Table 2.15: Qualification of teachers by level of school

| Level | Total | 9- 12 | 12+1 | 12+2 | 12+3 | 12+4 | M.A/M.Sc. |
|-----------|-------|-------|------|------|------|------|-----------|
| Primary | 8321 | 1834 | 5488 | 755 | 54 | 189 | 1 |
| Middle | 3456 | 37 | 495 | 2462 | 163 | 296 | 3 |
| Secondary | 2549 | 0 | 44 | 229 | 204 | 1982 | 90 |
| TVET | 298 | 0 | 76 | 66 | 35 | 98 | 21 |
| | 14624 | 1871 | 6103 | 3512 | 456 | 2565 | 21 |

Source: HRM MoE

Table 2.14 shows the overall manpower capacity of Zoba education offices. Out of the total work force, 13.12% are less than grade 12; 71.72% have certificate to diploma (12+1, 12+2 and 12+3); 14.98 % first degree (12+4 and 5), and only 0.19% have masters' degree. From these figures, it can be easily deduced that the majority of the work force (71.9%) is in the range of certificate to diploma. This is normally expected due to the large number of primary and middle schools which requires big number of certificate and diploma holders. According to MOE's requirement of minimum standard needed to teach basic education is a two year basic education teaching diploma and for the secondary level a minimum of Bachelors degree. Table 2.18 shows that 78%, 84.6% and 81.3% of the teachers fulfill the standards of qualification required to teach for primary, middle and secondary schools respectively. Hence, more effort will be needed to upgrade the teachers teaching at the respective levels in general to fulfill the national standards. Moreover, further analysis is required particularly for those who are teaching at secondary level, to identify the number of teachers teaching in their fields of specialization.

On the other hand, the analyses of the qualification of the administrative manpower in schools also reveal that, only 24.2% and 47.4% of the administrative staff at primary and middle level respectively have a diploma and above. Similarly, 34.1% and 11.5% of the administrative staff at secondary and TVET schools respectively have their first degree and above. Moreover, in congruency to these findings, the reports from Zoba education offices indicate that most of the existing school management personnel do not have adequate training on school leadership and management. Thus, if school managers are to serve their purpose and make the schools effective learning organizations, provision of Continuous Professional Development (CPD) on school leadership and management is crucial.

Table 2.16: Skilled administrative manpower at school level (director, Pedagogic head, Administrator)

| Level | Total Staff | Less or equal to 12 | 12+1 | Greater 12+1 | 12+2& 12+3 | Greater 12+3 | Less 12+4 | 12+4& 12+5 | M.A/M. S./M.Ed |
|--------------|-------------|---------------------|------|--------------|------------|--------------|-----------|------------|----------------|
| Primary | 884 | 80 | 590 | 214 | | | | | |
| Middle | 719 | 378 | 0 | 0 | 324 | 17 | | | |
| Secondary | 713 | 0 | 0 | 0 | 0 | 0 | 470 | 239 | 4 |
| TVET schools | 130 | 84 | 14 | 0 | 17 | 0 | 0 | 14 | 1 |

Source: HRM-MoE

In conclusion, with the existing limited professional capacity and skill at various levels of the Ministry and the availability of very limited material and financial resources, the performances of the administrative structures within the ministry cannot be undermined. By and large, it is assessed that the commitment and dedication of the staff is very encouraging. The findings reveal that quite substantial performances have been achieved.

Despite the achievements mentioned above, there were several challenges noted by the administrative structures which need due attention in the future to improve the institutional capacity of the ministry.

2.4.3 Educational Management Information System (EMIS)

The basis for EMIS is relatively well established at school, Zoba and Central levels for formal, non-formal and TVET. However, further system development, staffing, training and equipment are needed to further develop, expand, and manage the EMIS. The capacities for using the information produced by the system, at all levels, for policy, planning and management purposes are still limited and need to be developed. Targeted EMIS publications, to fill the information needs of users, should be developed with timely dissemination. EMIS is consolidated and expanded in to formal education, adult education, TVET in order to improve policy, planning, budgeting and monitoring for education sector at national and zoba levels. Continuous capacity development programs of education officers at Sub-zoba, Zoba & Central levels are undertaken for effective use of EMIS outputs for Planning and Management. However, previous assessment showed that a large part of needed information for managerial purposes is not timely & accurately provided from lower levels. Similarly, data analysis and reporting also takes too much time that some critical information is released too late for timely decision making.

Database for human resource management is available but not efficient. Personnel administration still uses manual files that are not timely updated; management information for payroll preparation is not yet fully established. Teacher & pedagogical staff deployment, training & promotion are not yet functional and not based on updated information on their qualifications & evaluation. The project management & reporting is not yet well organized at Zoba levels.

Database for project management is not fully equipped. Project accounting & reporting is organized in specific projects units according to the donor specific requirements. This calls for improving the overall EMIS data collection, processing and reporting system by integrating contemporary technology solutions and accompanying network infrastructure.

2.5 Management of Teachers

2.5.1 Quantitative Analysis of Teacher Management

During the academic year 2011/12 a total of 14,887 teachers were employed in all levels, out of which around 30% were females. As shown in table 4.16 below, the number of male teachers is dominant especially in the middle and secondary education.

During the academic years 2011/12 to 2015/16 the number of teachers didn't show a significant increase although a slight increase was observed in the academic year 2013/14. Overall, there has not been a significant in the number of teachers in the last five academic years.

Table: 2.17: Number of teacher by level from 2011/12 to 2015/16

| Level | Gen der | 2011/12 | | 2012/13 | | 2013/14 | | 2014/15 | | 2015/16 | |
|-----------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | Total | Gov | Total | Gov | Total | Gov | Total | Gov | Total | Gov |
| Primary | Tot | 8166 | 7421 | 8680 | 7813 | 9023 | 8124 | 8346 | 7366 | 8524 | 7532 |
| | F | 3318 | 2979 | 3252 | 2880 | 3367 | 2965 | 3002 | 2575 | 3275 | 2834 |
| Middle | Tot | 3867 | 3601 | 3905 | 3622 | 3882 | 3609 | 3563 | 3222 | 3507 | 3181 |
| | F | 632 | 594 | 672 | 639 | 727 | 695 | 675 | 629 | 658 | 602 |
| Secondary | Tot | 2854 | 2740 | 3076 | 2974 | 3177 | 3055 | 2800 | 2645 | 2567 | 2404 |
| | F | 457 | 441 | 557 | 543 | 641 | 617 | 631 | 609 | 536 | 515 |
| Total | Tot | 14887 | 13762 | 15661 | 14408 | 16082 | 14788 | 14709 | 13233 | 14598 | 13117 |
| | F | 4407 | 4014 | 4481 | 4062 | 4735 | 4277 | 4308 | 3813 | 4469 | 3951 |

Pupil Teacher Ratio by level

Pupil-teacher ratio (PTR) is the number of students, who attend a school divided by the number of teachers in the school. This ratio for primary level has been fluctuating over the period 2011/12 to 2015/16 reaching 42 in 2016. This indicates that there is one teacher for 42 students in primary school. The pupil-teacher ratio at the middle level is around 40 while for secondary level, it is 34 (Table 2.21).

Table 2.18 Pupil-teacher ratio by year and level: 2011/12-2015/16

| | Primary | | | Middle | | | Secondary | | |
|----------------|---------|---------|-----|---------|---------|-----|-----------|---------|-----|
| | Pupil | Teacher | PTR | Pupil | Teacher | PTR | Pupil | Teacher | PTR |
| 2011/12 | 334,245 | 8,166 | 41 | 167,928 | 3,867 | 43 | 95,152 | 2,845 | 33 |
| 2012/13 | 349,652 | 8,680 | 40 | 155,526 | 3,905 | 40 | 110,369 | 3,076 | 36 |
| 2013/14 | 361,604 | 9,023 | 40 | 152,005 | 3,882 | 39 | 115,422 | 3,177 | 36 |
| 2014/15 | 361,684 | 8,346 | 43 | 147,031 | 3,563 | 41 | 97,217 | 2800 | 35 |
| 2015/16 | 353,859 | 8,524 | 42 | 141,746 | 3,507 | 40 | 87,664 | 2567 | 34 |

Pupil-teacher ratio by Zoba and level

As shown in table 4.18 and figure 4.11 below, the pupils-teacher ratio varies from zoba to zoba in all levels. The highest pupil-teacher ratio is in zoba Debub in all levels with ratios of 52, 49 and 45 in primary, middle and secondary levels respectively. These ratios exceed the standard pupil-teacher ratio which is 42. The lowest pupil-teacher ratio is in zoba Debubawi Keih Bahri which is 24, 23 and 26 in primary, middle and secondary levels respectively. These ratios are much lower than the standard pupil-teacher ratio.

Table 2.19 Pupil-Teacher ratio by zoba and level in 2015/16

| Zoba | Primary | Middle | Secondary |
|------------|---------|--------|-----------|
| Anseba | 35 | 37 | 34 |
| Debub | 52 | 49 | 45 |
| DKB | 24 | 23 | 26 |
| Gash Barka | 41 | 41 | 41 |
| Maekel | 39 | 37 | 26 |
| SKB | 37 | 33 | 28 |

The PTR in most zobas is almost the same in all levels except for zoba Maekel and SKB where the PTR shows large disparities among the levels.

2.5.2 Qualitative Aspect of the Management of Teachers

Teacher Qualification and placement

The Ministry of Education has adopted a three band structure (National Education Policy, 2011) consisting of basic education (that comprises pre-primary, primary and middle school), secondary education, and tertiary education. In addition to two years of pre-school, basic education lasts 8 years and is split into grades 1-5 (primary) and grades 6-8 (middle). Secondary education lasts four years (Grades 9-12) and it provides general secondary education in arts and sciences. Teachers in the primary level are considered professionally qualified if they are graduates of the Asmara Community College of Education (ACCE) or its equivalent qualification. Teachers in the middle level are considered professionally qualified if they have a qualification of higher education diploma (12+2) or its equivalent qualification. Teachers in the secondary level are considered professionally qualified if they have a minimum qualification of Bachelor degree.

Table 2.20: Qualification of Teachers by level in 2011/12 to 2015/16

| A/Year | Primary Level | | | Middle Level | | | Secondary level | | |
|---------|---------------|-----------|---------|--------------|-----------|---------|-----------------|-----------|---------|
| | Total | qualified | Percent | Total | qualified | Percent | Total | qualified | Percent |
| 2011/12 | 8,166 | 6,945 | 85 | 3,867 | 3,152 | 81.5 | 2,845 | 2,273 | 79.9 |
| 2012/13 | 8,680 | 6,932 | 79.8 | 3,905 | 3,365 | 86.2 | 3,076 | 2,461 | 80 |
| 2013/14 | 9,023 | 6,945 | 77 | 3,882 | 3,323 | 85.6 | 3,177 | 2,544 | 80.1 |
| 2014/15 | 8,346 | 6,309 | 75.6 | 3,563 | 3,049 | 85.6 | 2,800 | 2,203 | 78.7 |
| 2015/16 | 8,524 | 6,487 | 76 | 3,507 | 2,924 | 83.4 | 2,567 | 2,072 | 80.7 |

Source: *essential education indicators, 2015/16*

Table 2.20 shows percentage of qualified teachers between 2011/12 and 2015/16. This shows that there is a shortage of qualified teachers across all levels. The percentage of qualified teachers for primary level was higher in the 2011/12 academic year than 2015/16, indicating that there is a need to address this issue. The qualification of teachers in the middle level is higher than the other two levels. This can be attributed to the Middle School Upgrading Program (Open Distance Learning Program) which was conducted between 2006 and 2010. In this upgrading program around 2000 unqualified teachers were upgraded to diploma level in two batches.

Teacher Training and supply

Inadequate teacher supply exerts constraint on the capacity of the Ministry to expand and improve enrolments, particularly at the middle and secondary levels. At present, only the Asmara ACCE is mandated with the responsibility of preparing teachers for the primary school system. The College of Education at Eritrea Institute of Technology prepares teachers for the Middle and Secondary levels.

Pre-service Training System

The ACCE has been offering a one year pre-service teacher preparation for secondary school graduates to teach at the primary level. But starting from the academic year 2014/15, the system has changed. This system involves the admission of student teachers from grade 10 completers who are willing to join the teaching profession. These student teachers attend two years of academic and pedagogical training and are qualified in certificate level to teach in the primary level. In addition, the ACCE has also started to upgrade teachers to diploma level so that they can teach at the middle level.

The College of Education at Eritrea Institute of Technology produces a two-year diploma program to teach in the middle level and Bachelors degree to teach in the secondary level. Since the College of Education could not meet the demands of middle and secondary school teachers it has been a common practice to recruit graduates of other fields from various colleges in the country. These recruits, however, are unlikely to have solid ground in educational theory and practice. Therefore, it is imperative that either the two colleges of education need to expand to fulfill the demand or the other colleges, as a transitional measure, need to introduce education related courses.

In-service Training System

As already indicated, the Asmara Community College of Education does not produce sufficient primary school teachers. As a result the ministry of education recruits direct teachers (high school completers) in remote areas to cover the shortage of teachers. To certify these teachers, the MOE provides a two summer training and one year self-study program at ACCE. In the last three years from 2014/15 to 2015/16 around 2400 teachers were certified.

Teacher Motivation and Retention

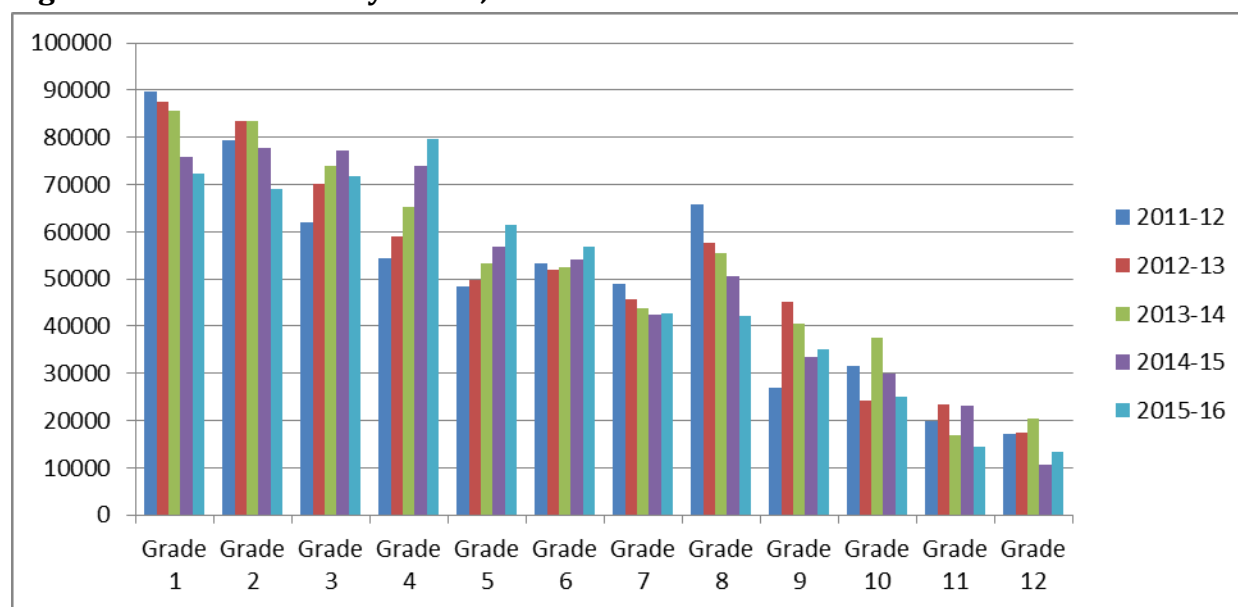
Teacher motivation and retention is influenced in many ways, such as:

- From 2015 the government has more than doubled teachers' salaries. This is expected motivate teachers to stay in the profession;
- The government is planning to introduce a salary system corresponding to qualification and experience in order to boost teachers' performance for better quality of education;
- The lack of criteria for teacher career professional development and recognition in the system has been affecting teacher motivation negatively;
- The poor working and living conditions, especially in the countryside, and those teachers who stay in the remote areas without incentives or hardship allowances;
- The promotion of female teachers to positions of middle and upper management levels are at minimum level;
- Low perception of the public on the value of the teaching profession undermines teachers' motivation and
- The mismatch between subjects taught and field of specialization of teachers.

Schooling Profiles and Retention

Schooling profiles present the advantage of providing more detailed information on enrolment than the simple average offered by the GER. They give a visual representation of schooling careers, from cycle access to completion. Repetition is an important indicator of the performance of a schooling system. They also enable the analysis of retention, providing a more precise enrolment diagnosis. Since we have data on repetition in all levels, we can calculate the access rate for each grade in all levels. Before calculating the access rate for each grade, we need to see the trend of enrolment in all the levels through certain years.

Figure 2.3: Enrollment by Grade, Eritrea: 2012-2016



Source: Eritrea, Essential Education Indicators 2015/16

As we can see from the above figure 2.3, there was a decline in enrollment in grades 1, 2, 7 and 8 through the year 2012-2016. On the other hand, there was an increment in grades 3 to 6, but there was fluctuations starting from grades 9 to 12.

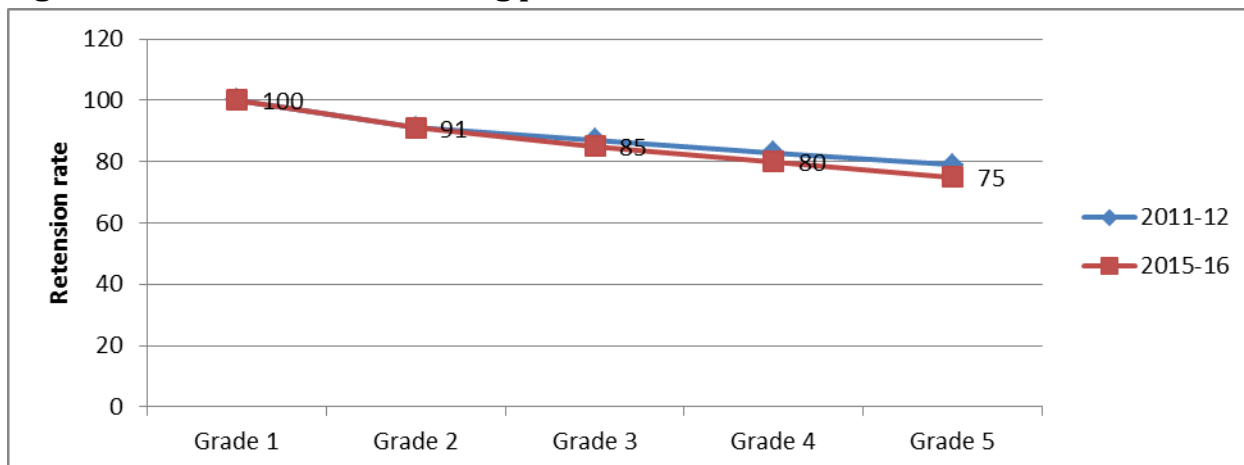
Table 2.21: Gross intake rate and Net intake rate

| Year | Gross intake rate | | | Net intake rate | | |
|---------|-------------------|-------|-------|-----------------|------|------|
| | T | M | F | T | M | F |
| 2011/12 | 138.1 | 144.5 | 131 | 50.8 | 53.5 | 47.9 |
| 2012/13 | 111.7 | 117.4 | 105.7 | 44.8 | 45.3 | 44.2 |
| 2013/14 | 100.5 | 106.4 | 94.2 | 41 | 41.6 | 40.4 |
| 2014/15 | 102.1 | 108.1 | 95.8 | 42.9 | 43.3 | 42.5 |
| 2015/16 | 107.7 | 113.7 | 101.3 | 42.7 | 43.4 | 41.9 |

Source: Eritrea, Essential Education Indicators 2015/16

From table 2.21, it can be seen that a great difference between the Gross intake rate and Net intake rate through the years and both rates are decreasing in the same magnitude. Most of the decrease is attributed to the change of the official entry age to primary education from age 7 to age 6 in 2012/13. Most students in the urban areas start at the age of 6, but those who are at the rural areas start at age 7. As the rural enrolment was greater than the urban enrolment in primary school in the country, the net intake rate also decreases as there are overage children in the first grade of primary education.

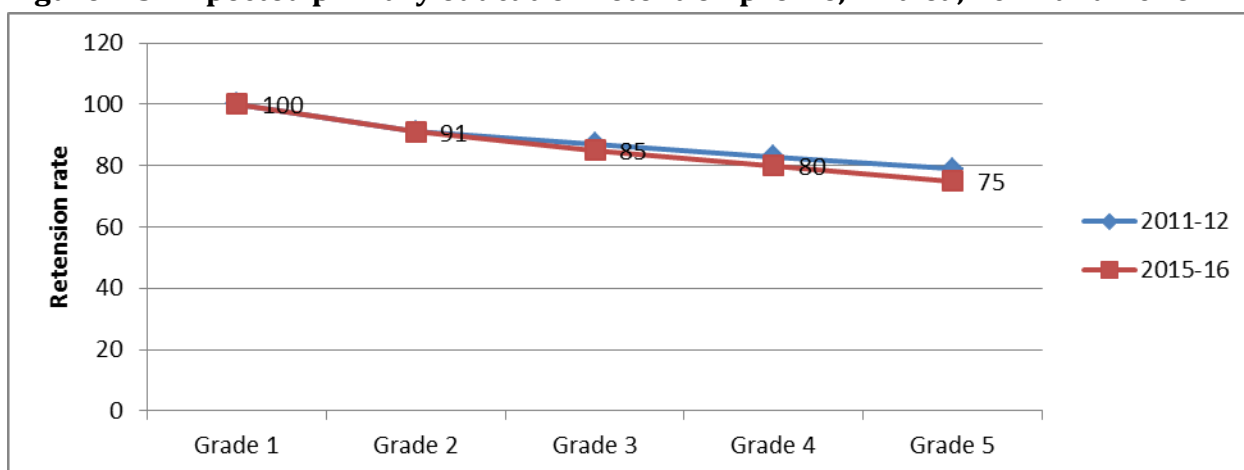
Figure 2.4: Cross section schooling profiles, Eritrea, 2011-12 and 2015-16



Source: Eritrea, Essential Education Indicators 2015/16

An access rate is defined as the number of non-repeaters in a given grade, regardless of age, as a percentage of the population of official age for that grade. In Eritrea the official age of entry to primary education is age six, and it is expected to finish at the age of 17 in secondary school. In 2015/16, grade 1 access is estimated at 103% which means all the students which are non-repeaters got access regardless of their ages as compared to 2011/12 which is higher, 123%. The access rate in grades 1 and 2 decreased in 2015/16 as compared to 2011/12, however, there was a steady increase in access rates from grade 3 to 8 in 2015/16 as compared to 2011/12. The completion of the primary cycle (grade 5), measuring progress towards universal primary education, has improved, from 61% in 2011/12 to 87% in 2015/16. In 2015/16, 72% access the middle school and 55% complete it. The access rate to the first and last grades of secondary education is 42% and 16% respectively.

Figure 2.5: Expected primary education retention profile, Eritrea, 2012 and 2016



Source: Eritrea, Essential Education Indicators 2015/16

Retention in both years were almost stable somehow higher in 2011/12 in the last grades of primary as compared to 2015/16 academic year. Of 100 pupils entering grade 1, 75 reach grade 5. Universal primary education implies a retention rate of 100% at the last grade of primary.

Internal Efficiency

The quantitative goals of education systems are not limited to increasing the number of children enrolled but also to ensure that children who begin a cycle complete it with no drop outs and repetitions; or with a minimum level of drops and repetition rates; as they greatly require additional human and financial resources.

Repetition

High repetition rates affect the internal efficiency of the education system mainly because of the cost of the extra years that repeaters spent in school. In Eritrea, the overall repetition- the percentage of students repeating a grade out of the total enrolled in that grade in the primary level has decreased between 2011/2012 academic year and 2015/16. Although it has decreased from 12.6% in 2011/2012 to 6.5% in 2013/14 it has also risen to 9% in 2015/16. Although both boys and girls performed better yet girls' repetition rate is less than boys' repetition rate as it is shown in the table below. The percentage repetition for boys is 10.1 while 7.6 for girls in the academic year of 2015/16.

Table 2.22: Percentage of repetition by level, 2011/12-2015/16

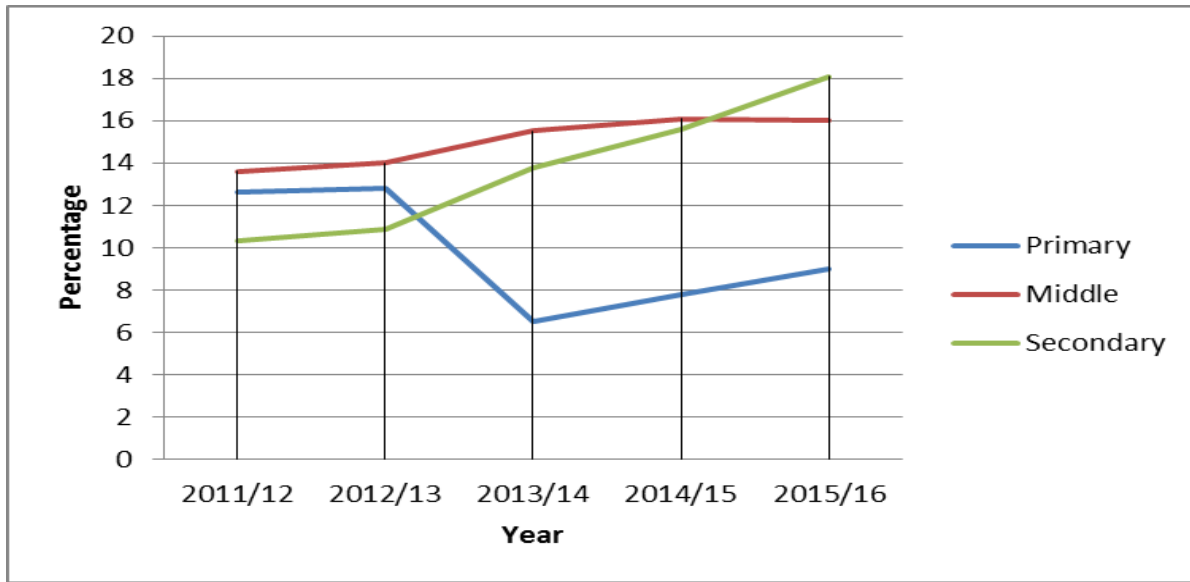
| Year | Primary | | | Middle | | | Secondary | | |
|---------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | T | M | F | T | M | F | T | M | F |
| 2011/12 | 12.6 | 13.4 | 11.5 | 13.6 | 15.9 | 10.8 | 10.3 | 12.3 | 7.5 |
| 2012/13 | 12.8 | 13.8 | 11.5 | 14.0 | 16.9 | 10.4 | 10.9 | 13.7 | 7.1 |
| 2013/14 | 6.5 | 7.2 | 5.7 | 15.5 | 18.4 | 11.8 | 13.8 | 17.5 | 9.0 |
| 2014/15 | 7.8 | 8.8 | 6.5 | 16.1 | 19.5 | 11.9 | 15.6 | 19.8 | 10.5 |
| 2015/16 | 9.0 | 10.1 | 7.6 | 16.0 | 19.7 | 11.6 | 18.1 | 23.3 | 12.3 |

Source: MoE; *Essential Education Indicators, 2015/16*

The repetition rate for middle level on the other hand worsened between the two academic years; it has increased from 13.6 to 16%. The repetition rate for secondary level has also similar trend that of middle level even worse in the last academic year. The percentage of repeaters in the academic year 2011/12 was 10.3 but after 5 years it has risen to 18.1, which is alarming. In all the levels, girls' students' repetition rate is better than the boys although the rate is not satisfactory. Girls' repetition rate is 7.6, 11.6 and 12.3 for primary, middle and secondary levels respectively, while for boys it is 10.1, 19.7, and 23.3 for primary middle and secondary levels respectively in the academic year of 2015/16.

As it is shown in the figure below, the repetition trend for all the levels has shown an increasing trend although the middle level has low repetition rates compared to the next two levels.

Fig 2.6: Repeaters by Level, Eritrea 2011/2012 - 2015/16

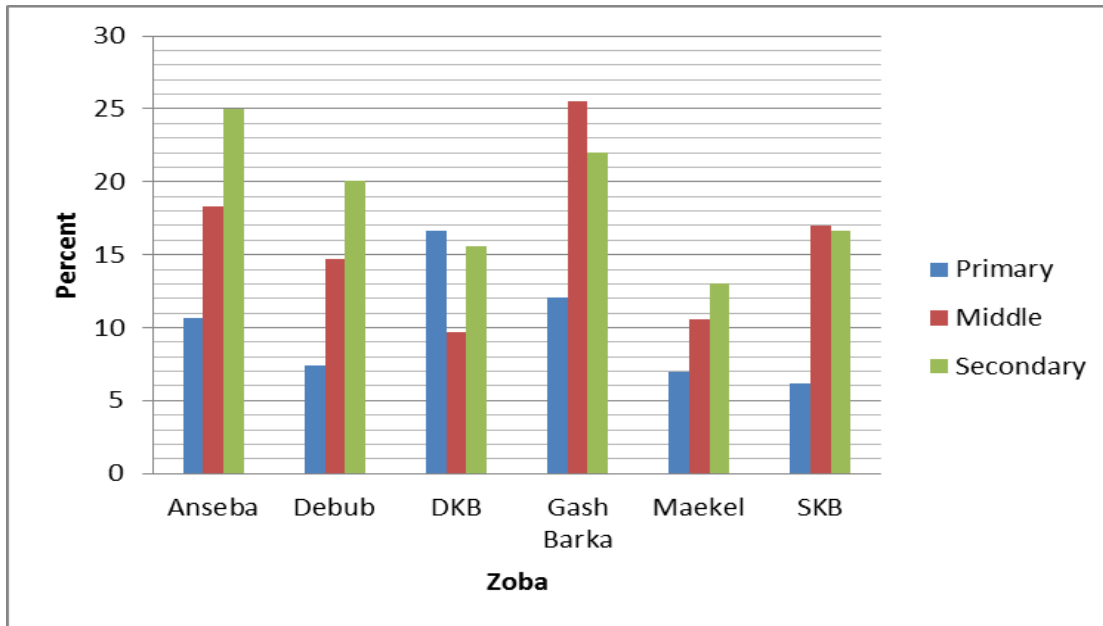


Source: MoE; Essential Education Indicators, 2011/12-2015/16

Table 2.23: Percentage of repeaters by Level and Zoba, 2015/16

Source: MoE; Essential Education Indicators, 2015/16

Figure 2.7: Repetition rate at all levels by zoba, 2015/16



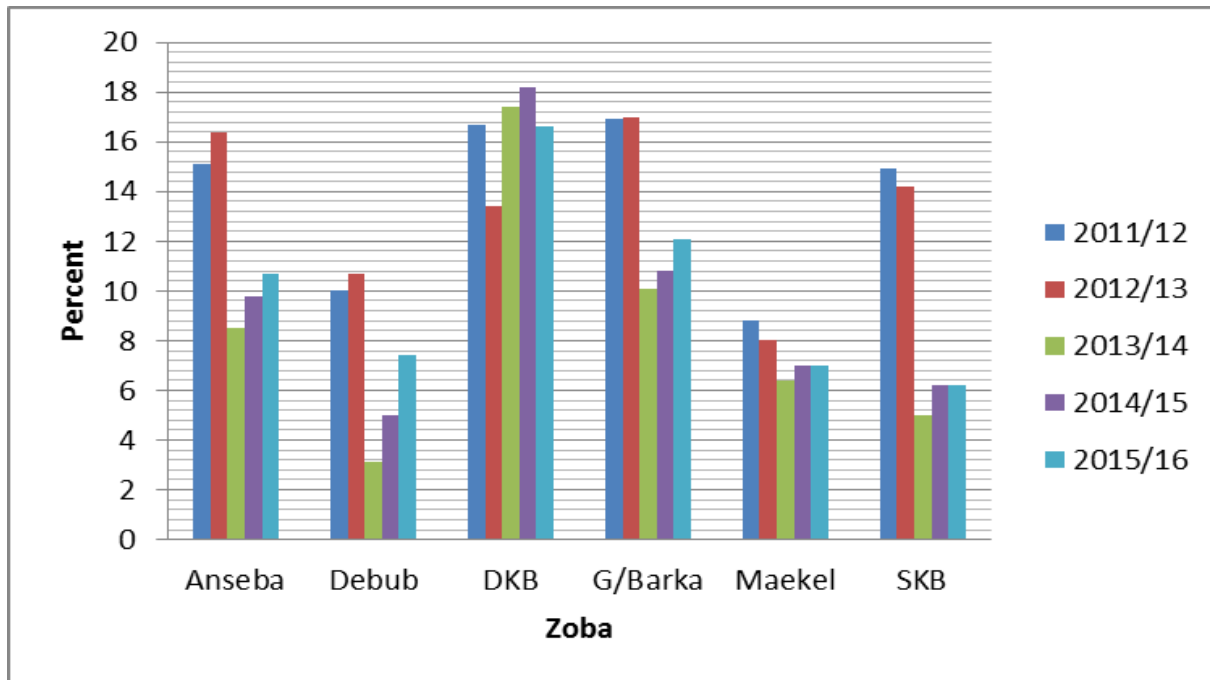
Source: MoE; Essential Education Indicators, 2015/16

The repetition rates at all levels the primary, middle and secondary levels show significant variation among Zobas. Higher repetition rates are recorded in Anseba and Gash Barka. The situation relatively improves in Maekel. Gash Barka (25.5%) has the highest repetition rate in middle level while Anseba (25%) has the highest repetition in the secondary level.

Table 2.24: Primary level: Percentage of repeaters by Zoba 2011/12-2015/16

| Zoba | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---------|---------|---------|---------|---------|---------|
| Anseba | 15.1 | 16.4 | 8.5 | 9.8 | 10.7 |
| Debub | 10 | 10.7 | 3.1 | 5 | 7.4 |
| DKB | 16.7 | 13.4 | 17.4 | 18.2 | 16.6 |
| G/Barka | 16.9 | 17 | 10.1 | 10.8 | 12.1 |
| Maekel | 8.8 | 8 | 6.4 | 7 | 7 |
| SKB | 14.9 | 14.2 | 5 | 6.2 | 6.2 |

Figure 2.8: Primary level: Percentage of repeaters by Zoba 2011/12-2015/16



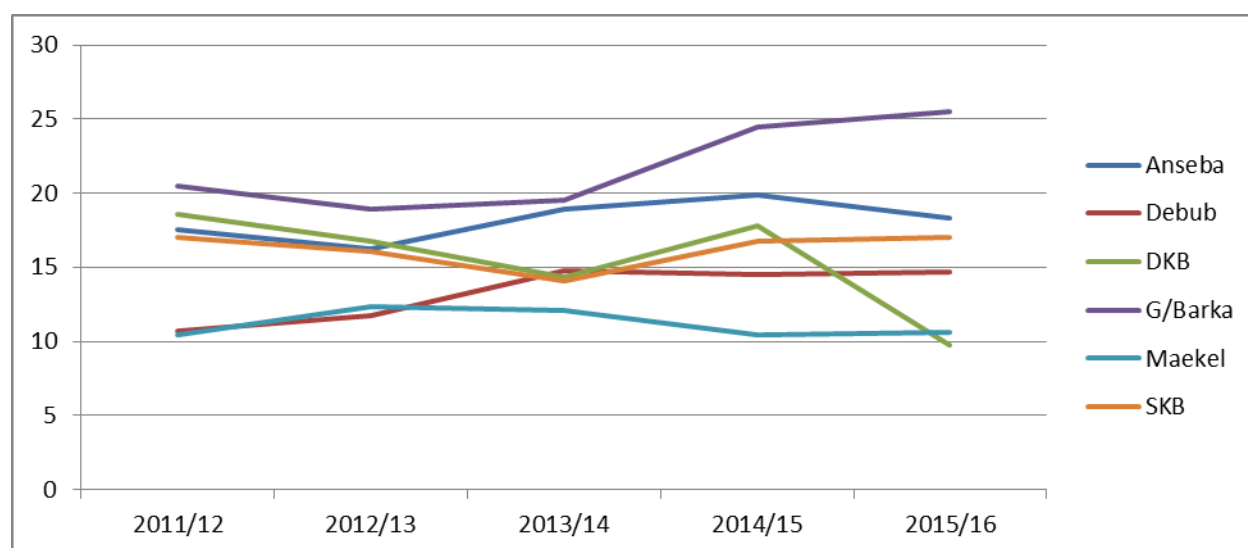
Source: Eritrea, Essential Education Indicators 2015/16

The repetition rate at the primary level has decreased almost by half in all the zobas during the academic year of 2013/14 except for zoba DKB where it has remained almost the same. However, the repetition rate has shown an increment in the consecutive academic years.

Table 2.25: Middle level: Percentage of repeaters by Zoba 2011/12-2015/16

| Zoba | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---------|---------|---------|---------|---------|---------|
| Anseba | 17.5 | 16.2 | 18.9 | 19.9 | 18.3 |
| Debub | 10.7 | 11.7 | 14.8 | 14.5 | 14.7 |
| DKB | 18.6 | 16.8 | 14.3 | 17.8 | 9.7 |
| G/Barka | 20.5 | 18.9 | 19.5 | 24.5 | 25.5 |
| Maekel | 10.4 | 12.3 | 12.1 | 10.4 | 10.6 |
| SKB | 17 | 16.1 | 14.1 | 16.8 | 17 |

Figure 2.9: Middle level: Percentage of repeaters by Zoba 2011/12-2015/16



Source: MoE; Essential Education Indicators, 2015/16

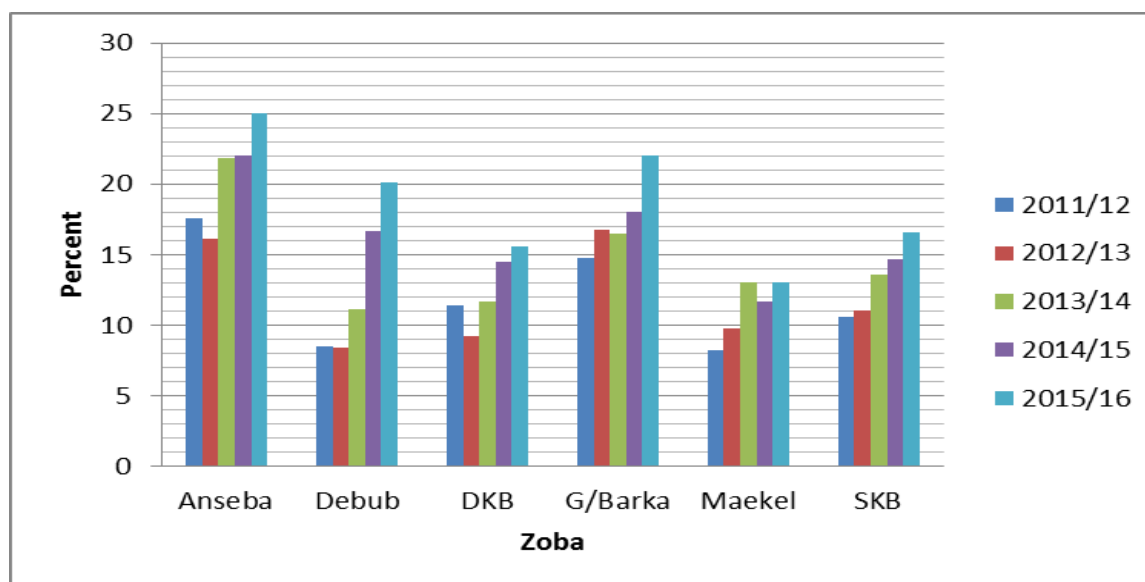
Regarding the middle level the repetition rate in the last 5 years ranges between 10 and 20% except for zoba Gash Barka where the result exceeds 20% and reaches 25.5% in the 2015/16 academic year having the highest repetition among all the Zobas. Not only that; it also has an increasing trend from 2013/14 to 2015/16. Gash Barka's repetition rate (the highest) is almost three times that of DKB's repetition rate (the lowest) in the last academic calendar. DKB's repetition rate has shown a significant decrease from 2014/15 (17.8%) to 2015/16 (9.7%) academic year.

Table 2.26: Secondary level: Percentage of repeaters by Zoba 2011/12-2015/16

| Zoba | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---------|---------|---------|---------|---------|---------|
| Anseba | 17.6 | 16.1 | 21.8 | 22 | 25 |
| Dehub | 8.5 | 8.4 | 11.1 | 16.7 | 20.1 |
| DKB | 11.4 | 9.2 | 11.7 | 14.5 | 15.6 |
| G/Barka | 14.8 | 16.8 | 16.5 | 18 | 22 |
| Maekel | 8.2 | 9.8 | 13 | 11.7 | 13 |
| SKB | 10.6 | 11 | 13.6 | 14.7 | 16.6 |

Source: MoE; Essential Education Indicators, 2011/12-2015/16

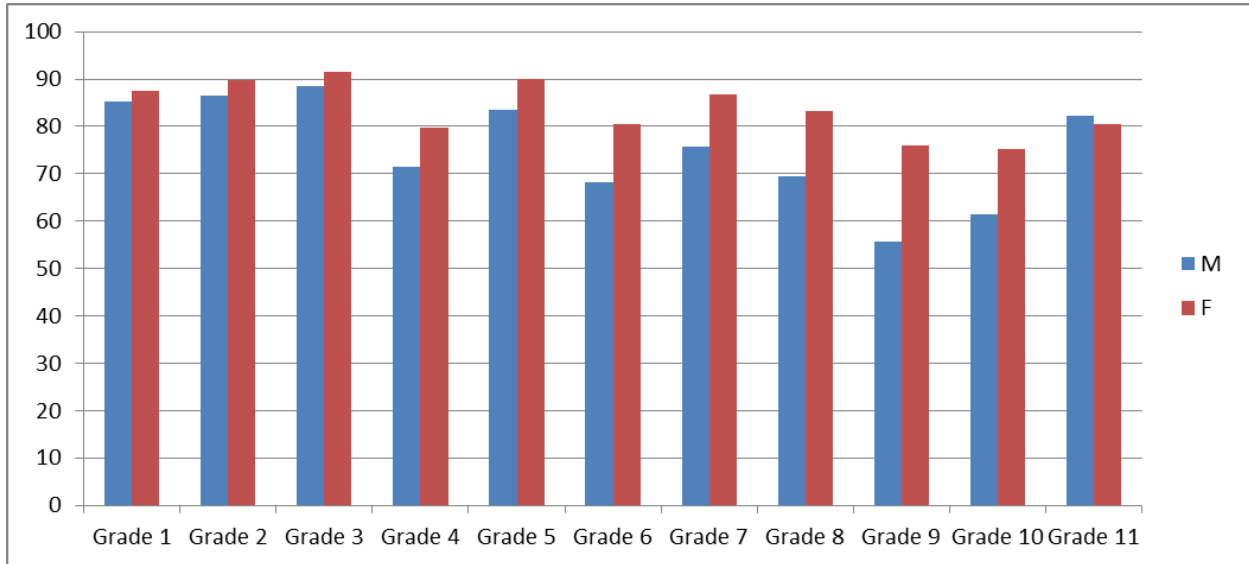
Figure 2.10: Secondary level: Repeaters by Zoba, 2011/12-2015/16



Source: MoE; Essential Education Indicators, 2011/12-2015/16

The percentage repetition for secondary level has generally an increasing trend in the last five academic calendars that is between 2011/12 to 2015/16. Although zoba Maekel has the lowest percentage repetition yet it has an increasing trend like the remaining zobas as it can be seen clearly in the above picture. Three zobas namely Dehub, Gash Barka and Anseba have crossed the 20% repetition rate in the latest academic year with 20.1%, 22% and 25% respectively.

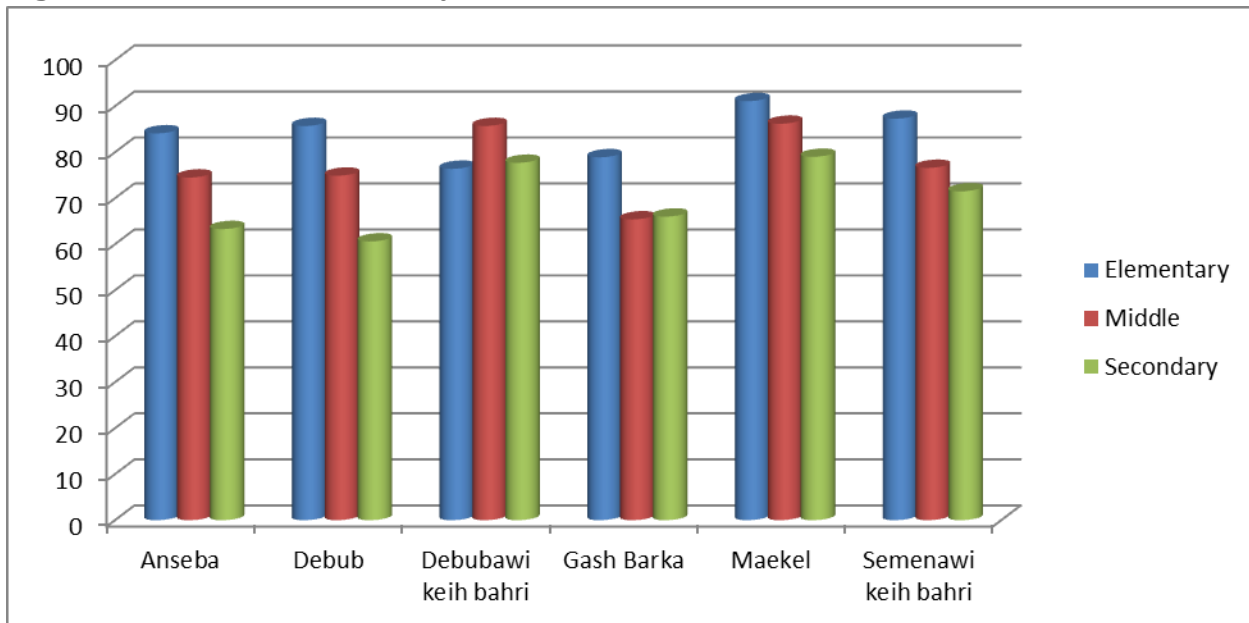
Figure 2.11: Promotion Rate, Eritrea, 2016



Source: Eritrea, Essential Education Indicators 2015/16

Figure 2.11 shows the promotion rate of all levels by grade and sex. The promotion rate for females is 83% and higher than their male counterparts, which constitutes 75%. The promotion rate shows an increment in the first three grades and declines in grade 4, and shows an increase in grade 5 and steadily decreases starting from grade 8.

Figure 2.12: Promotion rate by zoba, Eritrea, 2016



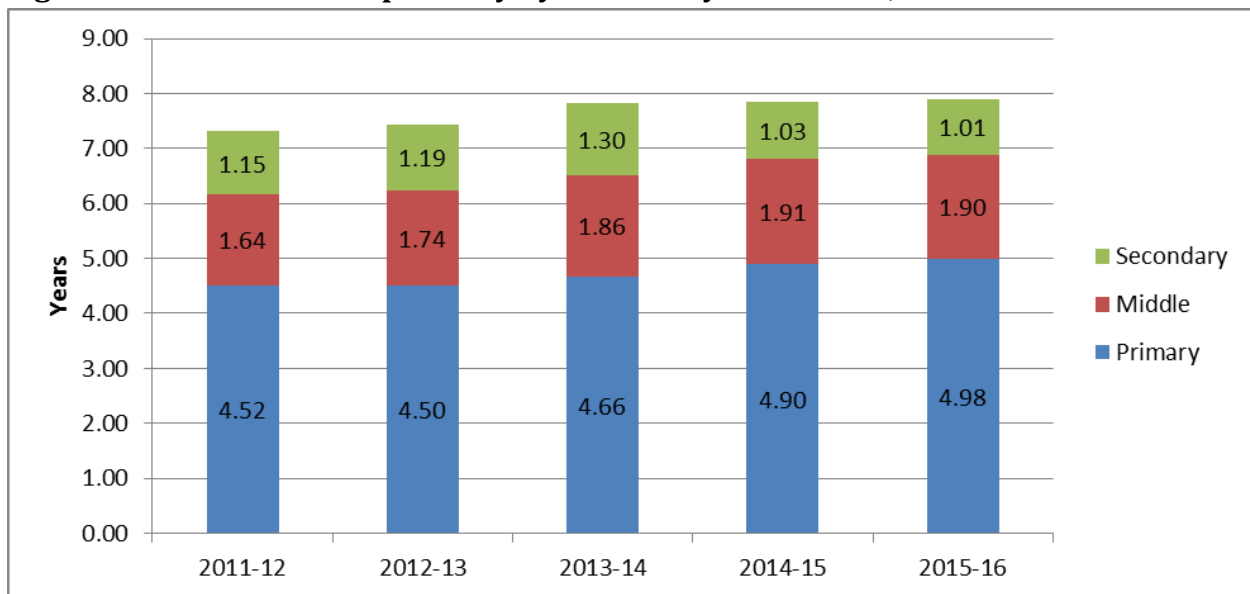
Source: Eritrea, Essential Education Indicators 2015/16

When we see the promotion rate through the zoba's, the promotion rate decreases as you go from primary to secondary education in all the zoba's except in Debubawi Keih Bahri, where the promotion rate for middle school is higher than primary and secondary education.

School Life Expectancy

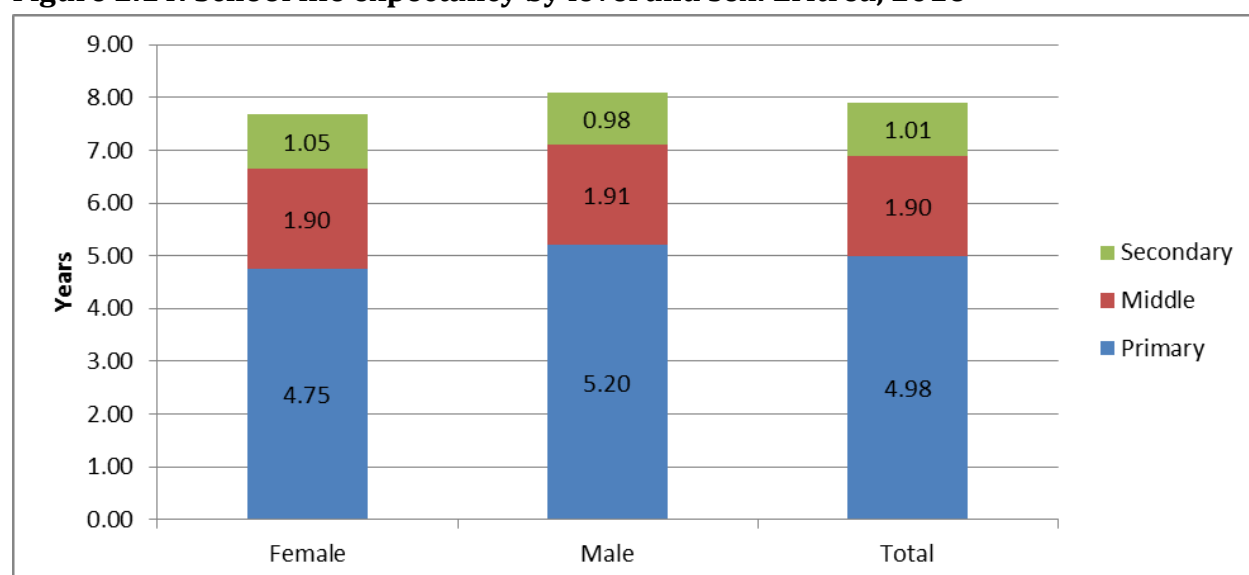
Another indicator, which can reveal important features of the education system, is the School life expectancy (SLE). School life expectancy is the average number of schooling years the children of a given country may hope to complete (repeated years are not included) giving the prevailing conditions offered by an education system. We get SLE by adding Access Rates across all grades. Just as life expectancy at birth is an indicator frequently used in demography to evaluate the level of a country's human development, school life expectancy is an indicator used to provide an aggregate measure of the level of coverage provided by a country's education system. To compute school life expectancy, the average of individuals' respective schooling career durations and information on enrolment and individuals' terminal schooling levels are required (what number or share of children finish their education at each level?). An individual who has never accessed school has a career of zero year duration; an individual accessing grade 1 but not reaching grade 2 has a career whose duration is of one year, and so on.

Figure 2.13: School life expectancy by level and year: Eritrea, 2012-2016



As the above figure shows, overall the SLE has shown an increment through the years. Nonetheless, it is evident that students do not graduate into higher grades easily, especially after completing primary education. The SLE for secondary education is very low as compared to primary and middle education.

Figure 2.14: School life expectancy by level and sex: Eritrea, 2016



Source: Eritrea, Essential Education Indicators 2015/16

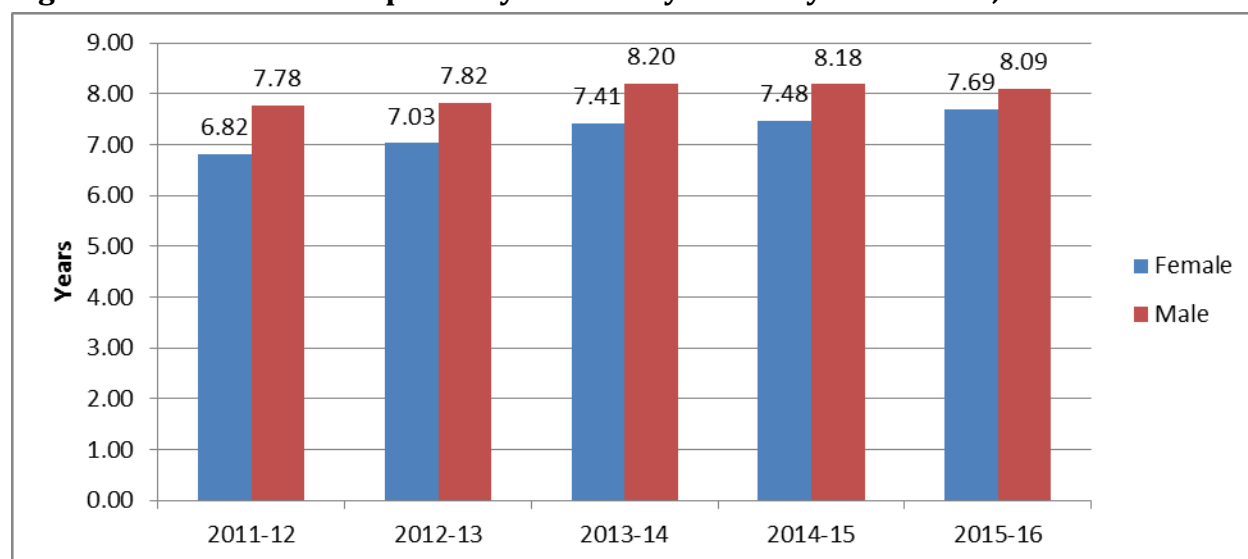
As can be seen from figure 2.14, if current enrolment were maintained, a six year old child could expect to remain in education for 7.9 years, an average that is built up from an expected 4.98 years in primary education, 1.90 years in middle, and 1.01 years in secondary education. Boys could expect to stay in education for 8.09 years, higher than girls which their SLE is 7.69.

Table 2.27: School Life Expectancy of all levels (1-12) by year and sex

| Year | Female | Male | Total |
|---------|--------|------|-------|
| 2011-12 | 6.82 | 7.78 | 7.31 |
| 2012-13 | 7.03 | 7.82 | 7.44 |
| 2013-14 | 7.41 | 8.20 | 7.82 |
| 2014-15 | 7.48 | 8.18 | 7.84 |
| 2015-16 | 7.69 | 8.09 | 7.90 |

Table 3.29 shows the SLE of all grades starting from 2012 to 2016. It shows gradual increment from year to year in both sexes. As the target is to make a child to stay 12 years in education, still the SLE has a gap of four years on average. There is a great work to be done by the MOE in the coming years to improve efficiency and increase SLE.

Figure 2.15: School life expectancy all level by sex and year: Eritrea, 2012-2016



Source: Eritrea, *Essential Education Indicators 2015/16*

Figure 2.15 show that the SLE through the years has shown small increment. Through all the years, boys have more chance to stay in education than girls, as the SLE for boys is greater than girls starting from 2012 to 2016. But in secondary education girls has more chance to stay in education than their male counter parts.

Supervision and Support

Supervision and support is an essential element of improving the teaching and learning process. The supervision system in the MOE is organized at national, regional, sub regional and school levels. It is believed that an improved system of supervision and support enhances the quality and standard of educational provision.

Supervision is conducted through:

- Systematically collecting and analyzing information, and relating it to explicit educational and occupational standards, criteria and values;
- Class room observation and learning process, and providing feedback and support to teachers and school managers to ensure the provision of quality education;
- The following are among the major supervision activities conducted;
- Monitoring the implementation of policies, standards and guidelines at all levels;
- Monitoring the implementation of the curriculum;
- Providing training to teachers and school directors;
- Conducting surveys and researches on quality of education and
- Proposing and/or implementing different intervention programmes that help to improve the quality of education.

Factors that limit the effectiveness of supervision, which includes:

- Shortage of transportation facilities for zoba and sub-zoba supervisors;
- Inadequate training and support for supervisors;
- Inadequate mechanisms employed to evaluate teaching/learning effectiveness and teacher performance;
- Under developed systems of school based supervision;
- Supervisors usually tend to focus on inspection rather than providing feedback and support.

2.6 The Management of Other Resources and Teaching Time

Provision and effective utilization of resources other than teachers mainly curriculum materials, educational infrastructure and facilities as well as effective use of teaching time are among factors that determine quality of teaching and learning. Requirements and standards about these resources and teaching time are explicitly indicated in the different policy guidelines of MOE. The existing situations about the underlined resources and teaching time are analyzed and summarized below.

Curriculum and School Support System Materials

Curriculum materials include; mainly textbooks, teacher guides and supplementary reading materials. Additionally, implementation of curriculum demands different school support systems that encompass library facilities and services, laboratory facilities, equipment and chemicals, computers, and different kinds of teaching learning aids including facilities for students with Special Educational Needs (SENs).

Textbooks are fully prepared, printed and distributed to schools by the MoE. Complete set of textbooks are provided to each student in Basic Education free of charge, nevertheless, secondary school students have to share a portion of the cost which is subsidized by the government.

Production/printing of textbooks and teachers guide puts into consideration a number of factors including: growth projection of the existing number of students, expected damage/life span and lose of the materials, storage and others. Periodic reprinting of the curriculum materials is in place to ensure their continuous availability.

The policy guidelines of MoE indicate that textbook student ratio in each subject in any grade is 1:1. A teaching learning survey conducted by the MoE (2011) and Annual work reports of all Zoba education offices and findings of Monitoring Learning Achievement Survey (MoE, 2015) show that textbook student ratio in majority of schools is 1:1. However, there are also schools especially those in remote areas that face shortage of textbooks mainly due to poor management of distribution.

School support systems are among the essential inputs for the effective realization of the objectives of the curriculum. Provision of sufficient, appropriate and functional school support system offer learners opportunities to relate theory with practice, develop practical skills, demonstrate and consolidate their conceptual learning and develop skills of investigation and innovation. Moreover, it enhances the effectiveness of implementation of Learner Centered and Interactive Pedagogy. Furthermore, they are instrumental to ensure the provision of equitable and quality education.

The MOE has been working to establish the underlined support systems in schools. Along the development and implementation process of the curriculum, the Ministry has also made efforts to expand and strength the provision of support systems in a significant number of schools, especially secondary level.

School Library

Table 2.28: Number of middle and secondary schools with library

| No | Zoba | Middle | | Secondary | | Grand Total | |
|----|----------------------|-----------|-------|-----------|-------|-------------|-------|
| | | Available | Total | Available | Total | Available | Total |
| 1 | Anseba | 32 | 64 | 14 | 16 | 46 | 80 |
| 2 | Debub | 58 | 58 | 23 | 23 | 81 | 81 |
| 3 | Debubawi Keih Bahri | 6 | 7 | 3 | 3 | 9 | 10 |
| 4 | Gash Barka | 19 | 74 | 13 | 17 | 32 | 106 |
| 5 | Maekel | 38 | 44 | 22 | 28 | 60 | 104 |
| 6 | Semyenawi Keih Bahri | 21 | 59 | 10 | 13 | 31 | 90 |
| 7 | Total | 174 | 364 | 75 | 100 | 249 | 464 |

Source: Department of General Education Schools Library service, 2017)

According to the library services unit of the MoE, only 47.8% middle and 75% secondary schools have library services. Comprehensive data is not available about the sufficiency and quality of books as well as functionality of school libraries. But, supervisory surveys conducted in some of the schools show that many of them don't have sufficient books and libraries facilities and many of those existing are not functioning well.

Science Laboratories

As part of its overall efforts in the provision of equitable and quality education, the government has been spending a huge amount of money in building science laboratory and demonstration rooms. Currently, 95 secondary schools (95%) have science laboratories. But, only 42 middle schools (11.5%) have science demonstration rooms. In the academic years of 2007/08 and 2009/10; 80 secondary schools were equipped with laboratory chemicals, equipment, models and

charts, and 188 middle schools with science demonstration items. Moreover, additional buildings of science laboratories and demonstration rooms are under construction across the six zobas.

Despite the efforts made to equip schools with the above mentioned facilities, reports from Zoba education offices and field visits reveal that many factors constrain the effective implementation of laboratory activities. To mention some: shortage of qualified lab technicians, teachers' lack of competency and confidence to carry out experiments.

Pedagogical Resource Centers

Pedagogical Resource Centers are among the support systems that offer opportunities for teachers to work together and collaborate in preparing and implementing effective lessons. Teachers collaboratively develop, innovate and share knowledge, skills and teaching learning resources in the pedagogical resource centers that could help them to enhance the teaching and learning process.

Since 1996, the Ministry of Education worked to establish and consolidate pedagogical resource centers at cluster and school level. All schools of basic education were organized under clusters and were provided with different resources. Various local trainings were conducted for teachers by PRC resource people in the school clusters. Moreover, about 23 pedagogical resource centers buildings of good standards that have conference hall, library, store, workshop and office were constructed across the country. Despite these efforts there is still shortage of PRCs and the existing ones are not functioning well, due to lack of resources, personnel and proper management structure.

School infrastructure

In Eritrea, the school system encompasses different levels: KGs, primary, middle and secondary. Depending on the size of population they have to serve and the maximum enrolment capacity they have, all school levels are categorized as small, medium and large. Thus, the number of administrative offices, staffroom, classrooms, library, science laboratory, information technology, teachers' resource room and workshops necessary for each category are not same.

School Buildings (Classrooms)

Currently there are 1423 schools in the country. From these schools, only 1178 (82.8%) have buildings for classrooms and 245 (17.1%) are working under shades and make-shift classrooms. These schools are found across the five administrative regions: Gash Barka 42 %, Northern Red Sea 27.8 % and Southern Red Sea 16.2%, Southern 8% and Anseba 5.3%. These schools don't even have any place to keep the teaching and learning materials they use and their documents. The type and distribution of classroom is as indicated on the table below.

Table 2.29: Type of classrooms in schools by Zoba

| No | Zoba | Total Class rooms | Type of classrooms | | | | | |
|----|------------------|-------------------|--------------------|------|------------|------|------------|------|
| | | | Building | | Under shed | | Make shift | |
| | | | Count | % | Count | % | Count | % |
| 1 | Anseba | 1473 | 1326 | 90 | 1 | 0.07 | 146 | 9.9 |
| 2 | Debub | 2406 | 2307 | 95.9 | 22 | 0.9 | 77 | 3.1 |
| 3 | Southern Red Sea | 303 | 211 | 69.3 | 25 | 8.3 | 67 | 22.1 |
| 4 | Gash Barka | 608 | 435 | 71.6 | 3 | 14.5 | 170 | 28 |
| 5 | Maekel | 1878 | 1855 | 100 | 00 | 00 | 23 | 1.2 |
| 6 | Northern Red Sea | 1000 | 806 | 80.6 | 95 | 9.5 | 99 | 9.9 |
| | Grand Total | 7668 | 6940 | 90.5 | 146 | 1.9 | 542 | 7.1 |

Source: MoE, EMIS 2017(unpublished)

About 10% of schools have classrooms under-shed and make-shifts. Learning is very challenging and difficult for students in these schools. Recent qualitative survey which was conducted by Department of General education (MoE, 2015) revealed that under-shade and make-shift classrooms are dusty and in many cases expose students for wind, sun and rain. The findings of this survey further depicts that the schools don't even have a place to keep documents and teaching and learning materials including textbooks.

Standards of functional requirements of MoE (2003) define physical infrastructure of different support system that are necessary for schools. Majority of primary schools don't have any physical structures such as rooms and furniture set for the provision of library, laboratory and IT services.

Looking into the enrolments and the number of classrooms available in schools, big class size is a challenge in some semi and urban areas. But there are also schools that have underutilized classrooms.

Furniture

Although, the government along its development partners and community made commendable efforts to equip schools, shortage of furniture remains a challenge in a number of schools at all levels.

Table 2.30: Availability of students' desks by Zoba

| Zoba | Desks | Enrolment | Shortage |
|---------------------|--------|-----------|----------|
| Anseba | 22462 | 85915 | -6176 |
| Debub | 42621 | 196951 | -23029 |
| Debubawi Keih Bahri | 3489 | 9197 | +429 |
| Gash-Barka | 23674 | 120847 | -49825 |
| Maekel | 36104 | 151725 | -16608 |
| Semenawi Keih Bahri | 11865 | 50553 | -4986 |
| Grand Total | 140215 | 615188 | -79195 |

Source: MoE EMIS (2017)

According to the standard requirements of MoE, three students have to share one desk. But, as indicated on the table above, with the exception of one, all zobas have shortage of desks. That means there are students who sit on the floor or they have to share four or even five for one desk.

School Facilities

School facilities include availability of sports play grounds, water, toilets and power supply. From 1098 schools at all levels, only 75.5 % have sport play grounds (MoE, EMIS 2017). However, supervisory reports show that a significant number of schools don't have sufficient sport materials and equipment that enable them to use the play grounds.

67% of the schools have water sources that include tap, well and reservoir. A recent supervisory survey (MoE 2015) also indicates that water sources of majority schools covered in the survey are either insufficient or non-functional. Another qualitative study about menstrual hygiene management by school girls (MoE, 2017) revealed that school girls face challenges due to the absence of water and sanitary facilities such as toilets.

From the schools where information is available, only 61.6% have latrines. Supervisory visits and observations show that most of these latrines are not functional or used by students because they are unclean or locked.

According to the MoE, EMIS), only 463 (32.5%) schools have source of electric power. Solar is the sources of power for 84 schools. Absence or inadequacy of reliable power is a major challenge for majority of schools across the country. This hampers the implementation of various activities of the schools including provision ICT services.

Monitoring of Effective Teaching Time

In Eritrea, on average, there are 180 school days (MoE: National Curriculum Framework, 2009) which means 720 hours in one academic year. School calendar is prepared and issued to all schools so that they plan and implement their annual work.

All schools in the country, regardless the shift system, have five working days in a week in which each day consists of five working hours. These working hours are allocated for the different subjects taught in schools. Students in grade 1-3 have to learn in class for six periods (lesson sessions) of 40 minutes each and grade 4-12 have to learn seven periods per day. Generally, the allotted instructional time for schools is shorter than that of sub-Sahara African countries.

Since, systemic monitoring system is not in place, lost teaching time is not well recorded and reported. Without having regular records and documents, thus, it is difficult to know the exact amount of teaching time that has been lost every year. Nevertheless, it has been annually reported and repeatedly mentioned by all ZEOs as well as supervisory visits and qualitative surveys that there is a considerable loss of teaching time every year. Late opening and early

closing of schools, shortage and high attrition rate of teacher and absenteeism are among the major causes for the loss of teaching time in schools.

Late Opening of Schools

Much of allotted teaching time loss is due to late opening of schools for classes. For example, according to work reports of ZEOs in the academic years 2012/13 to 2015/16 and also supervisory visits; majority schools have been opened for class, on average at least 1-2 weeks late after summer vacation which means 5-10 days or 35-70 hours of loss teaching time. There are also some schools especially those far from the center of ZEOs which start class even 3-5 weeks late. The main reasons for being late to start class at the beginning of the academic year include: late deployment of new teachers, reluctance of teachers to go to schools in remote places, inadequate preparations of schools to start class in time, lack of transportation, etc. Moreover, there is also time lost for time table arrangements by the schools.

Shortage of Supply and High Attrition Rate of Teachers

Reports from Zoba Education offices indicate that a significant number of teachers leave the job every year for various reasons. In such situations, certain subjects are fully or partially not taught. A qualitative survey report on small secondary schools also indicated that some of the schools in the survey did not implement the allotted time for certain subjects due to shortage of teachers.

Absenteeism

Annual work reports of Zoba Education Offices and supervisory visits show that absenteeism of teachers is among the main causes for the loss of teaching time. Within the timeframe of the school calendar, there are public holidays and teachers are absent for some days before and after these holidays resulting in loss of instructional time. Moreover, there are teachers who are absent for some days because they tend to be engaged in additional income generating activities. Furthermore, absenteeism of teachers is very common in many places especially rural areas because they have to travel monthly to collect their salary from the center. Many teachers who work in the suburbs of urban areas are also absent (or at least late) for a number of days at the beginning and end of week days because they travel to places where they permanently reside.

Generally, considerable portion of the allotted teaching time is reduced to a great extent in majority of schools due to the above mentioned factors. Although, some schools make arrangements for makeup classes, generally, there is no systemic mechanism of compensating the lost time.

Teachers and Teacher Education

The Asmara Community College of Education (ACCE) has been offering a one year pre-service teacher preparation for secondary school graduates to teach at the elementary level. But from the academic year of 2014/15, the system has changed. This system involves the admission of student teachers from grade 10 completers who are willing to join the teaching profession. These

student teachers attend two years of academic and pedagogical training and are qualified in certificate level to teach at primary. In addition, ACCE has also started a diploma program to upgrade the qualification of teachers and directors to diploma level. Although it has started for few number of trainees it will eventually expanded to accommodate more trainees.

The College of Education (attached to the Eritrea Institute of Technology) produces a two-year diploma program to teach in the middle level and Bachelor's degrees to teach in the secondary level. Since the College of Education at the Eritrean Institute of Technology (EIT) could not meet the demands of middle and secondary school teachers the MOE recruits graduates from various colleges in the country and provides them short term training in teaching methodology. The recruits from various colleges are unlikely to have firm ground in teaching methodology and practice. Therefore, it is imperative that the two colleges need to be expanded to fulfill the demand. Moreover, or the other colleges need to introduce education related courses.

2.7 Present Situation: Cross-Cutting Issues

2.7.1 Special Needs and Inclusive Education

In the past decades, the Government of State of Eritrea made significant efforts to raise the visibility of education services and opportunities for children including those in disadvantaged circumstances such as children in rural areas, girls, children from nomadic livelihood families, children with disabilities, street or working children, orphans, and other vulnerable children.

However, differential conceptual constructs of disability and variability in 'special needs' education understandings continues to challenge, among others, estimating the actual number and type of target population and the 'special' educational support need that can be rendered to the children in the school system. National surveys indicate that about five percent of the overall household population in Eritrea has a person with a disability (EPHS, 2010). Recent rudimentary EMIS data on disability indicates that in 2015/16 academic year, there were about 8,650 children with various levels and types of impairments, of whom girls make up 44.2%.

Formal education services for children with disabilities started in the 1960s mainly for the deaf and blind. Currently, there are three segregated special schools two for the deaf and one for the blind. The special schools are boarding in style and are located in Asmara and Keren, both of which are in urban areas. The capacity of these schools is very limited and a large number of deaf and blind children are out of school. As a long term strategy the MOE believes the ongoing effort for consolidating inclusive education strategy will lead to a stage where by the segregated and special needs classes would be phased out.

The MoE accords school access for deaf and blind in special elementary level schools. In these special schools, total enrolment of students barely exceeds about 180, and two of these schools for the deaf are non-governmental. Thus, many children with disabilities residing outside the location of the special schools largely are out of school. The special schools are elementary level,

and hence children completing from these special schools join regular middle schools with limited formal systematized learning support. In 2002-2005, the MoE piloted inclusive approaches of education in the context of children with 'Special Educational Needs'. Subsequently, the MoE developed Policy and Strategy on Inclusive Education (2008). This policy reaffirms that 'schools should accommodate all children', including children with disabilities. Additionally, under ESDP schemes, the MoE constructed 25 special resource rooms in six zobas, and staged awareness raising among educators.

Efforts are being undertaken also to integrate children with developmental disabilities into mainstream schools, in a self-contained special classroom. In 2015/16, these classrooms enrolled more than 300 students in about 15 special classes of 15 schools of two zobas. The needy remote rural neighbourhoods remain excluded. Moreover, the quality of education provision remain severely inadequate. Formal teacher training scheme and trained teachers, and modified or alternative curriculum and learning materials are not available to respond to students special education support service.

Local belief systems and attitudes that stigmatize, hides and deny education opportunity for these children are prevalent in communities. Additionally, absence of recognized Sign Language training for education, absence of vocational training for students completing elementary or middle, and limited children's early stimulation in childhood periods are observed challenges in the meagre services for children with disabilities.

Challenges:

- Absence of operational and conceptual guidelines in the provision of education for children with disabilities and/or 'Special Needs' for all level schools;
- Education access severely limited to few children , levels and placements, though it is the third exclusionary factor locally (OOSC study, 2015);
- Absence of modified or alternative curriculum and learning materials for special classrooms, special schools or other 'special needs';
- Negative beliefs and attitudes amongst stakeholders- teachers, teacher educators, curriculum developers, communities, etc.- that exclude children with disabilities or special needs.
- Shortage of qualified teachers for children with disability

2.7.2 Information and Communications Technology (ICT)

The establishment of an integrated system of ICT infrastructure, facilities and e-Learning solutions, along with qualified human resources, dedicated for teaching and learning, human capacity development, educational planning, management and research, is essential for qualitative transformation of the education system. It is a key contributor for effective and efficient educational planning and management, enhancing the quality of educational provision

and improving students' engagement, learning and achievement. Moreover, it engenders contemporary learning skills of the 21st century such as information accessing and processing, collaboration, critical thinking, and problem solving, which are essential in preparing learners to thrive in networked knowledge societies and succeed in economies that are increasingly reliant on technology.

The ICT in education program was launched in January 2005 as a quality and institutional capacity development component of the educational reform process. The principal policy orientation of the program was to improve the quality of education by integrating ICT as a tool for teaching and learning as well as for educational management across the education sector. In its initial phase, a fundamental component of the program was to ensure mastery of basic ICT skills among students, teachers and school management personnel as a basis for utilizing ICT as a tool for teaching and learning and for educational management. Tremendous efforts have been made and significant successes achieved in ensuring this policy orientation by deploying ICT resources in schools, training and retraining teachers and curriculum development. However, more needs to be done to ensure holistic and equitable access to ICT resources across the country.

Since the launching of the ICT-in-Education program in 2005, the MoE has been making continuous deployment of ICT facilities to schools. These efforts have also been accompanied by ICT training programs for teachers and education managers to ensure effective management and utilization of ICTs in schools. As a result, ICT labs have been established in 155 lower and upper secondary schools across the country. However, as there are 366 lower secondary and 104 upper secondary (total 470) schools, this represents only 33% coverage. Moreover, there are 969 primary schools that have yet to be covered in the program. This indicates that there is a significant digital divide within and between the different school levels and geographical locations of the country.

Despite the endeavors to integrate ICT in education, the following challenges have remained, among many others, as barriers to full attainment of the desired goals:

ICT Equipment and Facilities: ICT equipment and facilities are expensive and most of our schools are still facing the challenge of inadequacy of ICT facilities for teaching and learning. In some cases, this is compounded by lack of and/or poor management and maintenance practices.

Human Capacity Development: Successful integration of ICT into teaching and learning requires rethinking the role of teachers and reforming their preparation and professional development. This implies that provision of extensive human capacity development programs in ICT, both pre-service and in-service, is a critical element of success. An equally important factor for effective implementation of the program is the level of ICT knowledge, skills and attitudes of education managers and teachers. However, due to limitation of resources (human, financial and

material), capacity building in this domain remains a major challenge for the effective utilization of ICT as a pedagogical and management tool in schools.

ICT Infrastructure: Among the major infrastructure for ICT in education are electricity and telecommunications network. Electricity is a basic necessity for installing computers and other ICT facilities to provide ICT education in schools. Hence, availability of reliable electric power supply is a vital component of the ICT in education program. Similarly, telecommunications network is an essential component for ICT in education as a connectivity infrastructure. For ICT in education to be utilized effectively and efficiently, its usage should go beyond learning basic ICT applications to accessing the extensively diverse and rich educational resources in the internet as well as communicating and sharing resources among individuals (e.g. students, teachers) and institutions (e.g. schools). In Eritrea, as in most developing countries, the availability of electricity is limited to the main cities, towns and some semi-urban and rural catchments surrounding them. Most remote peripheries of the country do not have electricity, except few where the communities have managed to install diesel power generators.

Similarly, in telecommunications the fixed line telephone services follow almost the same pattern as the electric power distribution lines. However, the mobile phone network is expanding fast with wider coverage across the country. But the frequency and bandwidth is not yet strong enough to support internet connectivity especially in remote areas.

From the above discussion, it is apparent that the most urgent problems concerning ICT in education in Eritrea are lack of sufficient coverage of electricity and telecommunications network infrastructure. This in turn has a significant impact in limiting the expansion of ICT in education in rural schools and resulting in digital divide and educational disparities.

Challenges:

- Growing demand for ICT in schools vs. limited supply;
- Lack of dedicated and sustainable source of development and recurrent budget for ICT in Education;
- Lack of electric Power Supply in most rural and semi-urban areas;
- Limited coverage and low band width communications/connectivity infrastructure;
- Critical Shortage of qualified ICT teachers and technicians;
- Prevalence of digital divides among rural and urban areas due to lack of infrastructure.

2.7.3 Education in Emergencies

Education in emergencies (EiE) was recognized as a key component of humanitarian response in Eritrea. In the Gash Barka and Northern and Southern Red-Sea Zoba which are a home for the nomadic and semi-nomadic communities are frequently affected with strong seasonal winds, and sand-storms which inflict heavy damages to school buildings, tearing away corrugated iron rooftops and destroying other school properties. Another natural hazard that occurs less

frequently but which has a profound effect is drought that has disrupted the regular educational programs especially in the southern and western regions for this reason, Eritrea's nomadic pastoralists are characterized by low levels of enrolment and inadequate instructional materials and infrastructure. The primary school net enrolment rates for the mostly nomadic regions of the Southern Red Sea (SRS), Northern Red Sea (NRS), Gash-Barka and Anseba are well below the national average. At the sub-regional level, the situation is bleak with nomadic sub-regions remaining far behind the non-nomadic sub-regions in enrolment and retention. This is highly attributed to the mismatch in the delivery of formal education, and the lifestyles, cultural practices, geographic locations and the effect of changing weather patterns on the nomadic communities and disasters and risks.

- There are a number of emergencies that contribute to vulnerabilities in education:
- Refugees from Somalia
- A number of schools in disaster - prone districts especially from nomadic communities have from time to time reported disruption of normal learning programmes due to drought.

In response to these vulnerable circumstances:

- MoE developed nomadic education policy
- In an effort to increase participation of the nomadic children in education, MoE setting-up formal, non-formal, boarding and para-boarding schools in areas inhabited by nomadic communities using locally available materials,
- Provision of free education in eliminating some hidden education costs that may inhibit nomads from access of education;
- Flexible arrangements in existing schools to accommodate more children who because of the mobility of their parents could not be admitted on time;
- Raise awareness among nomads on the value and benefits of education; encourage community members where schools are located to be 'host families' to nomadic school children (especially young girls) while their parents are away, train and deploy teachers from nomadic communities;
- Drafted emergency and disaster risk reduction management policy and strategy;
- In order to mainstream DRR in schools to sensitize both learners and teachers about disasters in institutions, MoE in collaboration with UNICEF is preparing DRR training manuals.

2.7.4 Girls Education

Government has been making efforts to enhance enrolment and participation of girls in education. Provision of material and financial incentives to school girls, constructing gender segregated toilets, opening boarding and Para-boarding schools, development of communication strategies of girls education and use of affirmative action for college/higher education admission

are among the effort made by the MOE. Although in limited areas, National Union of Eritrean Women (NUEW) also provides tutorial activities in middle and secondary schools.

Generally, enrolment and educational participation of girls has been significantly increased for the last two decades. However, 20% of school age girls have never been enrolled to school and enrolment declines sharply in middle and secondary education. The percentage of female enrolment is slightly lower than the percentage of male enrolment overall across all levels of education. Low enrolment rate and low educational participation is more acute in some of the ethnic groups and remote areas of the country which is related to challenges mainly long distance, cultural practices and lack of awareness of the community about the value of girls' education.

As stated in the gender policy and strategy of 2005, sustainable development cannot be realized without the full and equal participation of girls at all levels of education. The main strategic elements include raising gender awareness of the communities as the key to successful mainstreaming of gender education. This requires:

- Expanding the number of female teachers in schools by expanding their enrolment in teacher training institutions;
- undertaking training and mobilization campaigns for the community;
- formulation of gender awareness training materials to sensitize communities and teachers about gender issues and the socio-cultural practices that hamper the participation of girls and women in education;
- 21% respectively gender fair awareness training.

The recruitment of female teachers has always been encouraged by the Ministry. In spite of this, at present, female teachers at elementary level comprise 38.4% of the total elementary teacher population, whereas at the middle and secondary levels they merely comprise about 18.8% and. In order to raise female participation in the teaching service and to fill the gap in teacher output, the Ministry shall endeavor to recruit more female teachers through affirmative action.

Table 2.31: Number of teachers by level and sex in 2015/16 (Move)

| Level | Gender | Total | Percentage of female teachers |
|--------------------|--------|-------|-------------------------------|
| Pre-primary | Total | 1,601 | |
| | Female | 1,558 | 97.2 |
| Primary | Total | 8,524 | |
| | Female | 3,275 | 38.4 |
| Middle | Total | 3,507 | |
| | Female | 658 | 18.8 |
| Secondary | Total | 2,567 | |
| | Female | 536 | 21 |

When compared of female teachers to their male counter parts it is clearly shown that male teachers are more dominant particularly in the middle and secondary levels as shown in the table above.

Identified Challenges and gaps

- Enrolment and educational participation of girls very low in middle and secondary level
- Majority schools don't have functional WASH (Water Sanitation and Hygiene) facilities
- Girls are absent and drop out due to lack of Menstrual Hygiene Management (MHM)

CHAPTER 3

THE EDUCATION SECTOR PLAN (ESP) 2018-2022 PROGRAMME OVERVIEW

The Education Sector Plan (ESP) 2018-2022 (hereafter referred to only ESP) sets out the GSE's strategy for achieving national education goals and objectives and the SDG-4, for the coming five years. The ESP sets the following priorities: (i) basic education (early childhood development, primary education, middle level, out of school children and youth and adult literacy); (ii) secondary education; (iii) teacher education; and (iv) technical and vocational education.

The ESP organizes these priorities into the following thematic areas, as (i) access and equity, (ii) quality and relevance, and (iii) System capacity and management.

In the preparation of the ESP due consideration is given to previous ESPs and studies, evaluation reports and consultations made within the ministry and zoba and sub-zoba education offices and other stakeholders. The various issues raised during consultations are integrated in the Plan. Moreover, the ESP targets are developed based on the aspirations of the National Education Policy, enrolment projections and improving the quality of education services.

3.1 Overall ESP Goal, Objectives, Strategies and Targets

The overall goal of ESP is to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. In accordance with the overall sectoral priorities, the ESP features the following three components:

- Access and Equity of General Education (pre-primary, elementary, middle and secondary education), Adult education and Technical and Vocational education.
- Quality and relevance of education of all levels and sub-sectors of education.
- Institutional Capacity building.

Based on the detailed projections the plan anticipates the following increases in number of students, teachers and classrooms.

Table 3.1: Additional Students, Teachers and Classrooms between 2018/19 and 2022/23

| Level | Additions, 2017/18 to 2022/23 | | |
|-------------|-------------------------------|----------|------------|
| | Students | Teachers | Classrooms |
| Pre-primary | 51,090 | 2,812 | 1,056 |
| Elementary | 51,213 | 3,024 | 2,430 |
| Middle | 28,151 | 1,945 | 1,195 |
| Secondary | 108,740 | 2,996 | 1,867 |

Each of the program objectives, strategies and targets is presented in sequence in the following sections.

3.2 Equitable access

To increase enrolment, the provision of infrastructure should be given more attention to accommodate the growing number of students in all regions. The new ESP similar with the previous plans envisions the provision of infrastructure in all levels of the sector to attain the planned target of the enrolment of students. In this new ESP, various education facilities are planned to be built and equipped to all levels and some of them are: new construction and rehabilitation of schools and procurement of different educational facilities and supplies.

Equal opportunities for all students will be ensured by expanding equitable access to education starting from pre-school up to secondary education level with targets as described below for respective subsectors. The provisions of equal opportunities for education has also made by considering children with special education needs, vulnerable and marginalized groups. This should able to reduce illiteracy and increase access to quality education particularly for those special needs children.

3.3 Relevance and Quality

Enhancing the relevance of education is also the main area of the ESP. The concept of relevance is vital to ensure and confirm that education aligns with the Government's effort in reducing poverty through sustained economic growth and improved opportunities for employment, including self-employment.

During the ESP period, a curriculum for pre-primary education will be introduced and curriculum revision or reform will be made in primary, middle and secondary education. Moreover, the curriculum of TVET will be revised to be linked to the needs of the labour market.

The new ESP incorporates several programs and activities which will be implemented to ensure the improvement of quality of education. Such programs/activities include: teacher upgrading programs; teacher familiarization with the curricula; enhance the availability of qualified teacher in targeted area of education like English and mother tongue languages, mathematics, science,

science laboratory, available of equipment, textbooks and learning materials. One of the major factors to sustain for the quality of education is ensuring the quality of teachers. Hence, all teachers will meet the minimum required qualification at all levels of the education and distributed equitably across all regions of the country. To this end, an improved system for recruitment and deployment will be employed.

3.4 System Capacity and Management

The achievement of overall objectives of the Plan, the specific objectives of each of its forgoing two components, the effective implementation of strategies, and the effective execution of means and activities will require effective and efficient delivery capacity of the sector. Yet, it is well recognized that the delivery capacity of the MOE at all levels of the sector is not adequate.

Recognizing this challenge, the MOE has sets out strategies for the development of institutional capacity. Besides, as capacity is strengthened through practice, the implementation of the capacity development strategies outlined below will be mainstreamed and integrated with the implementation of the first two components.

3.5 Strategies

The new ESP has identified clear strategic priorities mainly emphasize based on some aspects of education service delivery such as quantitative, qualitative and equity. The education sector has a number of demands which have to be addressed in order to reach the targets set in its education policies whereas due to limited financial and human resources the ministry has focused only on the main interventions which have strategic importance of vision by 2030. Based on this context the Ministry has identified strategic priorities.

In order to effectively address to the development challenges, the quantitative aspects will be addressed through increased enrolments that target to achieve the goals sets in SDG for levels of education.

The delivery of quality aspects will also be addressed during the period of ESP by equipping and enhancing the requisite skills of teachers and directors of school. This can be achieved by providing training and professional development; providing facilities such as teacher and learning materials, adequate school infrastructure; libraries and science laboratories; providing continuous supervision and support at zoba and school level; revision of the curricula; and strengthen the development of relevance of the education system.

Moreover, by establishing good partnership with key stakeholders and development partners, the ESP will address the government policy of equitable access to education at all levels of education. For this reason, with regard to equity issue the plan also takes in to consideration to a school mapping among the first activities to be undertaken during the new ESP period.

The objectives of the components connected to overall education sector objectives and broad explanations of the main activities that will be carry out during the ESP period are mentioned below and summarized in the Programme Framework Matrix (Annex I). Further, a more detailed implementation plan for the components will be described in the annual work plan and budgets (AWPBs). Moreover, the ESP programs and the budget are presented on the basis of sectors of all levels and key cross cutting issues. Activities and allocations are better applied by linking to their respective sectors and sub-sectors. This mainly allows the ministry to have a better visibility of resource allocation to overall sector targets and accordingly improves the system of resource tracking which is very essential in monitoring and reporting.

Finally, the ESP program has been grouped into different components mainly by sectors, sub-sectors and by specific areas of intervention across cross cutting issues. These classifications in total will contribute to the education sector objectives and also help in reaching the sector targets mentioned in the period of ESP.

CHAPTER 4

PROGRAM PRIORITY ACTIONS

4.1. Priority I Access and Equity

4.1.1 Pre-primary

The provision of Early Childhood Care Education (ECCE) is an important pillar in Education for All. Most of the 4-5 year children in rural communities' lack opportunities for school readiness preparation due to an absence of ECCE centers, while the urban-based children face difficulties to access the private ECCE centers which are not affordable to the majority of the urban population

Objectives for Pre-Primary Education

The main goal of ECCE is to promote holistic development of all Eritrean children from birth to six years, so as to enable them lay foundations for formal education and lifelong learning skills.

Thus, in the current 2018-2022 ESP development, the following objectives and strategies are drawn:

Objective 1: Expand equitable access of ECCE services to all, including vulnerable communities and groups

Strategy:

- 1.1: Increase preprimary enrolment by expanding RCCC and KGs annexed classes within primary school premises greatly targeted to rural and remote areas
- 1.2: Sensitize communities on the importance of ECCE

Objective 2: Ensure holistic development of children 0-6 years

Strategy:

- 2.1: Expand parenting intervention in adult literacy centers
- 2.2: Enhance capacity of adult education facilitators to provide parenting education to parents/care givers
- 2.3: Raise the level of awareness of stakeholders and communities through advocacy and media

Targets

The main target for pre-primary by 2022 will be to improve enrolment rates and the MOE will attempt to achieve a GER of 40% and a NER of 30% by 2022/23 from 25.2% GER and 21.2% NER in 2017/2018.

Table 4.1: Projection of Enrolments in Pre-primary Education by year, 2018/19 to 2022/2023

| | Base Year | | | | | |
|------------------------|-----------|---------|---------|---------|---------|-----------|
| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/2023 |
| Pop. 4-5 | 247,206 | 254,128 | 260,990 | 268,819 | 275,809 | 283,531 |
| Gross Enrolment | 62,322 | 71,584 | 81,236 | 91,625 | 102,165 | 113,413 |
| Net Enrolment | 52,299 | 58,258 | 64,448 | 71,136 | 77,864 | 85,059 |
| GER | 25.2 | 28.2 | 31.1 | 34.1 | 37.0 | 40 |
| NER | 21.2 | 22.9 | 24.7 | 26.5 | 28.2 | 30 |

Pre-primary Education: The five -year plan makes a provision for early childhood care and education (ECCE) in the form of kindergarten construction and teacher training.

New classroom requirements for pre-primary schools are shown in Table 4.2. This is based on a reduction in the number of students per section from 38.9 in 2017/18 to 35 in 2022/23.

Table 4.2: Projected classroom requirements in pre-primary schools

| | Base year | | | | | |
|---|------------|------------|------------|------------|------------|------------|
| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/2023 |
| Required classrooms expansion | 274 | 141 | 149 | 161 | 167 | 180 |
| Classrooms to be replaced (258) | | 51 | 51 | 52 | 52 | 52 |
| Required classrooms construction | 274 | 192 | 200 | 213 | 219 | 232 |
| Classroom rehabilitation (2%) | 28 | 34 | 38 | 42 | 46 | 50 |

4.1.2 Primary Education

The advent of free primary education resulted in an increase in enrolment and access without critical consideration of the infrastructure needed, ie schools, classrooms, administrative facilities and other school-related infrastructure. Furthermore, there is need for more teachers' houses to cope adequately with their increased demand. If enrolment is to increase to achieve a net enrolment ratio (NER) of 100% by 2022/2023, resolving the issue of inadequate infrastructure and its effective utilization is imperative.

Equity is also inadequately addressed in Eritrea due to existing geographical and socio-economic disparities. In urban areas, children have a greater opportunity of accessing quality primary education as opposed to their counterparts in rural areas.

Objectives for primary Education

Based on the identified gaps indicated above the objectives and strategies to be implemented in primary from 2018-2022 include the following:

Objective 1: Increase enrolment in primary education to ensure equitable access to all

Strategy:

1.1: Expand learning spaces and rehabilitate existing classrooms

- 1.2: Recruit and train new teachers on mother tongue education to meet the additional enrolment
- 1.3: Recruit and train more female teachers
- 1.4: Enhance the participation of girls and other disadvantaged groups by introducing incentive schemes
- 1.5: Raise the awareness of community on the value of education with emphasis on girls enrollment
- 1.6. Strengthening existing nomadic school
- 1.7 Pre-service training of student teachers

Targets

Table 4.3: Projection of Enrolments in Elementary Education by level and year, 2018/19 to 2022/23

| | Base Year | | | | | |
|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Gross Admission | 77,049 | 79,371 | 81,602 | 84,305 | 86,927 | 89,804 |
| Net Admission | 41,150 | 46,657 | 51,685 | 56,646 | 61,236 | 81,640 |
| GAR | 108.3 | 108.7 | 109.0 | 109.3 | 109.7 | 110 |
| NAR | 57.9 | 63.9 | 69.0 | 73.5 | 77.3 | 100 |
| Gross Enrolment | 347,821 | 349,887 | 356,533 | 368,928 | 384,375 | 399,034 |
| Net Enrolment | 301,595 | 313,882 | 325,976 | 340,130 | 354,151 | 369,408 |
| Pop 6-10 | 357,521 | 367,175 | 376,354 | 387,645 | 398,499 | 410,454 |
| GER | 97.3 | 95.3 | 94.7 | 95.2 | 96.5 | 97.2 |
| NER | 84.4 | 85.5 | 86.6 | 87.7 | 88.9 | 90 |
| | | | | | | |

The projections assume that the introduction of normal progression in grades 1-3 (0% repetition rate) in 2011/12 academic year will remain the same until 2022/23. The Ministry will also ensure a transition rate of 91.7% between elementary and middle schools in 2022/23, and the projections has also assumed a major reduction in repetition rates from an average of 7% in 2017/18 to 5% in grades 4-5 in elementary schools in 2022/23.

This greater efficiency will mean a substantial increase in the net enrolment by 67,813 elementary students in grades 1-5 over the five- year period of the ESP, an increase of 22.48%.

Table 4.4: Projected Increases in Student Flows (%) in Elementary Education

| Grade | Repetition | | Dropout | |
|-------|------------|---------|---------|---------|
| | 2017/18 | 2022/23 | 2017/18 | 2022/23 |
| 1 | 0 | 0 | 7 | 3 |
| 2 | 0 | 0 | 5 | 3 |
| 3 | 0 | 0 | 5 | 3 |
| 4 | 15 | 5 | 5 | 3 |
| 5 | 7 | 5 | 5 | 3 |

This greater efficiency, plus projected construction of new schools, means the NER will also increase substantially at the elementary level, from 84.4% in 2017/18 to 90% in 2022/23.

Classroom Requirements: New classroom requirements for elementary schools are shown in Table 4.5. This is based on a reduction in the number of students per section from 45.5 to 40.

Table 4.5: Projected classroom requirements in elementary schools

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|---|------------|------------|-------------|------------|------------|------------|
| Required classrooms expansion | 44 | 69 | -350 | 267 | 275 | 305 |
| Classrooms to be replaced (1864) | | 372 | 373 | 373 | 373 | 373 |
| Required classrooms construction | 44 | 441 | 23 | 640 | 648 | 678 |
| Classroom rehabilitation (2%) | 154 | 155 | 164 | 165 | 177 | 190 |

Most of the classrooms are required for reduction in the average number of students per section.

As part of improved access, additional special needs education classrooms for disabled persons will be constructed to provide relevant education and skills that will enable learners to support their lives after completion of their education.

In summary, the Ministry will provide 51, 213 new elementary school places over the five year period in 2430 new classrooms.

4.1.3 Middle Education Level

Objectives for Middle Education

The objectives of the 5-year plan are to increase equitable access to middle school level especially for girls and children from disadvantaged communities.

Objective 1: Increase enrolment and provide equitable access to all middle school age children

Strategy:

- 1.1: Expand learning spaces
- 1.2: Rehabilitating existing classrooms

1.3: Raise the awareness of community on the value of education with emphasis on girls enrollment

1.4: Enhance the participation of girls and other disadvantaged groups by introducing incentive schemes

1.5: Waive any financial expenses demanded by school for the poor and other disadvantaged groups

Target

Table 4.6: Program projections: Enrolments in middle schools

| | Base Year | | | | | |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Transition Rate | 87.3% | 88.2% | 89.0% | 89.9% | 90.7% | 91.7% |
| New Admission both sexes | 56,730 | 58,942 | 58,035 | 56,291 | 57,016 | 61,849 |
| Gross Enrolment | 183,170 | 201,279 | 210,697 | 212,206 | 210,194 | 211,321 |
| Net Enrolment | 91,675 | 99,498 | 107,970 | 116,497 | 125,627 | 135,035 |
| Pop 11-13 | 197,759 | 202,703 | 208,378 | 213,588 | 219,355 | 225,058 |
| GER | 92.6 | 99.3 | 101.1 | 99.4 | 95.8 | 93.9 |
| NER | 46.4 | 49.1 | 51.8 | 54.5 | 57.3 | 60.0 |

Under the ESP 28, 151 additional students are projected to be accommodated in Grades 6-8 over the five-year period. This will increase the NER from 46.4% to 60% and the GER will increase from 82.6% to 93.9% over the same period.

The average repetition rates at the middle level are projected to decline from about 14% per annum for grades 6-7 to 9.5% by 2022/23, while for grade 8 it will decrease from 46% to 30% (Table 4.7).

Table 4.7: Projected Increases in Student Flows (%) in Middle Education

| Grade | Repetition | | Dropout | |
|-------|------------|---------|---------|---------|
| | 2017/18 | 2022/23 | 2017/18 | 2022/23 |
| 6 | 16 | 10 | 6 | 3 |
| 7 | 11 | 9 | 6 | 3 |
| 8 | 46 | 30 | 7 | 3 |

Considerable improvement is expected in gender equity under the five year plan. The enrolment of females is expected to increase substantially at the middle level, over the five year plan period. The female GER will be increased in parallel with that of boys to achieve gender parity by

2022/23. Greater progress is expected in enrolment of age-appropriate females (age 11-13). The gender parity index is expected to be 0.92 from existing 0.85 in 2022/23.

Major gender improvements are also foreseen at middle level. Total female enrolment will increase in parallel to that of boys.

Classroom Requirement: New classroom requirements for middle schools are shown in Table 4.8. Some of the classrooms are required for reduction in students/section and classrooms using double shift. The new classroom construction for middle school includes the replacement of 643 existing non-standard classrooms (Table 4.8).

Table 4.8: Projected classroom requirements in middle schools

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|---|------------|------------|------------|------------|------------|------------|
| Required classrooms expansion | 338 | 264 | 161 | 58 | 10 | 56 |
| Classrooms to be replaced (646) | | 129 | 129 | 129 | 129 | 130 |
| Required classrooms construction | 338 | 393 | 290 | 187 | 139 | 186 |
| Classroom rehabilitation (2%) | 87 | 93 | 101 | 107 | 111 | 114 |

In summary, the Ministry will provide 28,151 middle school physical places over the five- year period. In addition, the Ministry will carry out major rehabilitation works in 526 classrooms.

4.1.4 Secondary Education Level

The secondary sub-sector aims to introduce a set of measures aimed at facilitating access for those adolescents. It also recognizes that the gender disparities evident in the sub-sector require proactive measures in order to raise the number of girls enrolled. It is necessary, therefore, that Government constructs new secondary schools and boarding schools for girls in selected day secondary schools.

Objectives for Secondary Education

The following objectives and strategies are set to address the identified challenges in the secondary education:

Objective 1: Increase equitable access secondary education system

Strategy:

1.1: Expand learning spaces and rehabilitate existing classrooms

1.2: Enhance the participation of girls and other disadvantaged groups by introducing incentive schemes

1.3: Raise the awareness of community on the value of education with emphasis on girls enrollment

Targets

Increase the proportion of the age group enrolled (enrolment of girls and underserved areas) from 27.9% at present to 48.7% by 2022/23; and increase the proportion of girls in total secondary enrolment by raising the female gender parity index (GPI) in total secondary enrolments from 0.90 2016/17 to 0.95 by 2022/23. Table 4.9 shows projected enrolments for secondary education by grade and year.

Table 4.9: Programme projections: Enrolment in secondary schools

| | Base Year | | | | | |
|------------------------|---------------|----------------|----------------|----------------|----------------|----------------|
| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Transition Rate | 43.80% | 47.67% | 51.53% | 55.40% | 59.27% | 63.13% |
| Total New Admission | 20,738 | 29,465 | 37,404 | 44,393 | 49,927 | 53,060 |
| Gross Enrolment | 94,877 | 109,590 | 128,852 | 151,757 | 177,713 | 203,617 |
| Net Enrolment | 81,446 | 93,620 | 106,476 | 120,074 | 133,959 | 148,608 |
| Pop 14-17 | 326,136 | 334,615 | 343,650 | 353,272 | 362,104 | 371,519 |
| GER | 29.1 | 32.8 | 37.5 | 43.0 | 49.1 | 54.8 |
| NER | 25.0 | 28.0 | 31.0 | 34.0 | 37.0 | 40 |

Over the next five years the transition rate from middle school (Grade 8 leavers) to secondary education is projected to be 63.13% by 2022/23. The number of students enrolled in secondary education is projected to increase by 108,740 and students raising the GER from 29.1% in 2017/18 to 54.8%. The net enrolment will increase by 67,161 during the projected five- years period. This will increase the NER from 25% in 2017/18 to 40% 2022/23, increasing the number of age-appropriate (14-17) students increased substantially during the five- year period.

Repetition rates are projected to decrease from an average of 13% per level per year to about 10.5% per year (Table 4.10).

Table 4.10: Projected Increases in Student Flows (%) in Secondary Education

| Grade | Repetition | | Dropout | |
|-------|------------|---------|---------|---------|
| | 2017/18 | 2022/23 | 2017/18 | 2022/23 |
| 9 | 19 | 10 | 11 | 6 |
| 10 | 17 | 9 | 10 | 6 |
| 11 | 3 | 2 | 13 | 7 |

The enrolment of females is expected to increase substantially, alongside male students, over the five- year plan period. This will lift the female GER and reduce gender gap. Even greater progress is expected in enrolment of age-appropriate females (age 14-17). The NER of girls at secondary level is expected to increase in parallel with that of the boys.

New classroom requirements for secondary schools are shown in Table 4.11. This is based on projected enrolment increases.

Table 4.11: Projected classroom requirements in Secondary schools

| | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|---|------------|------------|------------|------------|------------|
| Required classrooms expansion | 212 | 288 | 358 | 424 | 749 |
| Required double shift classroom reduction | 9 | 8 | 7 | 6 | 34 |
| Classrooms to be replaced (197) | 39 | 39 | 39 | 40 | 40 |
| Required classrooms construction | 260 | 334 | 403 | 470 | 823 |
| Classroom rehabilitation (2%) | 46 | 51 | 58 | 66 | 75 |

Class sizes (students/section) are expected to reduce over the five- year period from 62 to 55. In total, about 108,740 additional students are expected to be accommodated in the 1867 new classrooms. In line with SDG 4, special emphasis will be placed on expanding female enrolment and that of other disadvantaged groups through, *inter alia*, judicious construction of boarding facilities – and expanding the number of female teachers.

In addition, textbooks will be produced and distributed in order to enhance student learning; provision of school support systems including ICT will be expanded and consolidated and in-service training for teachers and school directors will be conducted.

4.1.5 Technical Vocational Education and Training (TVET)

Strategic outcomes of technical and vocational training include expansion of equitable access to technical and vocational training in order to enable in and out of school youths to benefit. Furthermore, it is intended to meet labour market demands as a response to the evolving economy. To achieve these strategic outcomes, it is necessary to expand and rehabilitate infrastructure in technical training institutions so that more in and out of school youths benefit.

Objective 1: Expand equitable access to technical vocational education and training through formal and non-formal provision

Strategy:

- 1.1: Revitalize and expand the capacity of the existing four TVET schools
- 1.2: Expand the provision of technical and vocational education and training through the construction of more TVET schools
- 1.3: Establish three new Skill Development Centers in three zobas

Targets

- Increase enrollment to TVET schools from 5% to 10% of the students who complete grade 10 ensuring 50% female participation with emphasis to the disadvantaged communities
- Increase number of trainees in SDCs from 120 in 2017 to 800 in 2022 with emphasis to the disadvantaged communities

Table 4.12 TVET Schools - Teacher Demand and Supply

| | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|--|------------|------------|-------------|-------------|-------------|
| Teachers | | | | | |
| Parameters: | | | | | |
| Teachers/Section or workshop | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| P/T – Technical | 25 | 25 | 25 | 25 | 25 |
| • Commercial | 40 | 40 | 40 | 40 | 40 |
| • Agricultural | 40 | 40 | 40 | 40 | 40 |
| • Academic | 50 | 50 | 50 | 50 | 50 |
| Demand: | | | | | |
| Teachers required with year start GER | 600 | 822 | 1044 | 1331 | 1683 |
| Increment Demand - domestic teachers | 205 | 222 | 222 | 287 | 352 |
| | | | | | |
| Supply domestic: | | | | | |
| Stock (5% attrition) | 375 | 570 | 781 | 992 | 1264 |
| Higher Education Institutes | 115 | 222 | 174 | 226 | 265 |
| Teachers attending upgrading programs | 90 | - | 48 | 61 | 87 |
| Teachers returning from upgrading programs | - | - | 90 | - | 48 |
| Total teacher workforce | 600 | 822 | 1044 | 1331 | 1683 |

Tables 4.12 show teacher requirements for TVET school level. This requirement of teachers is based on enrolment projections identified above, an assumed reduction in teacher-pupil ratios, and an attrition rate of 5% per annum in the stock of teachers.

4.1.6 Adult and Non-formal Education

The provision of Adult Literacy is an important pillar of SDG-4. Eritrea still remains with about 20% illiterates which will continue to derail development efforts nationally. CEE is designed for out-of-school children to complete the five-year primary school curriculum within three years, this non-formal approach helps to ensure basic education opportunities for disadvantaged and hard-to-reach children in Eritrea.

Objective 1: Improve access in adult literacy, CEE and continuing education programs

Strategy:

- 1.1: Identify and develop cost effective mechanisms of expanding and enhancing CEE learning centers by undertaking feasibility study (mapping assessment)
- 1.2: Expand and enhance adult literacy and CEE programs
- 1.3: Expand and consolidate continuing education program by maximizing proper utilization of available resources in formal schools

Objective 2: Narrow gender disparity in literacy, CEE and continuing education programs

Strategy:

- 2.1: Organize community and parents awareness raising and sensitization activities focusing on the importance of girls education
- 2.2: Introduce incentive schemes and awards to attract beneficiaries and especially girls
- 2.3 Enhance parenting education to encourage and raise interest of parents and communities

Objective 3: Raise public awareness and sensitizations

Strategy:

- 3.1: Enhance the awareness of society on the importance of literacy and continuing education program for adults and out of school children
- 3.2: Establish effective collaboration and partnership with stakeholders and partners
- 3.3 Organize workshops, conferences and meetings on the occasion of literacy day

Target

Table 4.13: Expected outcomes and targets (estimated projection)

| SN | Description | 2008 | 2015 (estm.) | 2022 |
|-----------|---------------------------------------|-------------|---------------------|-------------|
| 1 | National Literacy rate | 67% | 80% | 90% |
| 2 | Male literacy rate | 76.6% | 86% | 93% |
| 3 | Female literacy rate | 58.5% | 72% | 86% |
| 4 | Youth literacy rate(15- 24 years old) | 88% | 95% | 99% |
| 5 | Urban literacy rate | 84.8% | 90% | 96% |
| 6 | Rural literacy rate | 56.8% | 70.8% | 81% |

4.2 Priority II. Quality and Relevance:

4.2.1 Pre-Primary Education

Objective 1: Improve the quality of ECCE teaching and learning practices

Strategy:

- 1.1: Enhance the professional capacity of pre-primary teachers, directors and supervisors

Objective 2: Strengthen the quality of ECCE services

Strategy:

- 2.1: Equip ECCE Resource centers
- 2.2: Revitalize existing ECCE and RCCC with support of basic learning materials

4.2.2 Primary Education

Objective 1: Enhance professional capacity of teachers, School Directors and supervisors

Strategy:

- 1.1: Strengthen the professional capacity of teachers, school directors and supervisors through in-service training
- 1.2: Develop the pedagogic practice of teachers, school directors and supervisors through short-term training, seminars and workshops

Objective 2: Strengthen school support system

Strategy:

- 2.1: Equip elementary schools with library books and PRC materials
- 2.2: Establish new PRCS

Objective 3: Improve school environment

Strategy:

- 3.1: Replace makeshift classrooms with permanent classrooms
- 3.2: Consolidate school WASH facilities
- 3.3: Equip schools with sport facilities and physical education materials
- 3.4: Strengthen school health services

Objective 4: Strengthen the supply of curriculum materials

Strategy:

- 4.1: Develop curriculum materials
- 4.2: Equip schools with teaching and learning materials
- 4.3: Produce mother tongue teaching and learning materials

4.2.3 Middle Education

Objective 1: Strengthen the supply of curriculum materials

Strategy:

- 1.1: Supply textbooks, teachers guides and manuals

Objective 2: Improve school environment

Strategy:

- 2.1: Expand and consolidate school WASH facilities
- 2.2: Equip schools with sport facilities and physical education materials
- 2.3: Enhance school health services
- 2.4: Strengthen guidance and counseling services in middle schools

Objective 3: Strengthen school support systems

Strategy:

4.1: Strengthen schools with teaching aid materials, library books and science demonstration kits

Objective 4: Enhance the Professional capacity of teachers, directors, supervisors and other professionals

Strategy:

4.1: Familiarize teachers on curriculum materials

4.2: Enhance teacher's professional competence through short term training, seminars and workshops

4.2.4 Secondary Education

Objective 1: Strengthen the supply of curriculum materials

Strategy:

1.1: Develop relevant textbooks and teachers guides to the beneficiaries.

1.2: Print and reprint textbooks and teachers guides

Objective 2: Establish and strengthen the school support system

Strategy:

2.1: Expand and consolidate the provision of furniture, equipment, chemicals models and charts for secondary school science laboratories

2.2: Expand and consolidate the provision of reference books and furniture for secondary school libraries

2.4: Strengthen the professional capacity of support system personnel and teachers

Objective 3: Improve School Environment

Strategy:

3.1: Expand and consolidate school WASH facilities

3.2: Equip schools with sport facilities and physical education materials

3.3: Strengthen school health services

3.4: Enhance guidance and counseling services

Objective 4: Enhance professional capacity of teachers, directors, supervisors and other professionals

Strategy:

4.1: Strengthen the pedagogic practice of teachers, directors and Provide through in-service training

4.2 Enhance teacher's professional competencies through short term training, seminars and workshops

4.2.5 Technical Vocational Education and Training (TVET)

There are increased concerns over the dwindling skills levels of artisans and technicians joining the labour force or production sectors in Eritrea. This means that institutions providing for technical and vocational training have to improve on the delivery of technical and vocational education, among other areas. Improvements include the adaptation of technologies to local needs, industry-centred approaches to course development and adaptation of international instructional materials to local needs. There is, therefore, a need to raise the profile of quality and relevance of technical and vocation education to meet the demand of the market, industry and economy.

To attain the above objective, the TVET sub sector desires to work upon some interventions and has planned to implement the following programs as stated in the logical frame work below:

Objective 1: Achieve mastery of technical and vocational skills and competencies

Strategy:

- 1.1: Attach instructors and students to industries
- 1.2: Conduct CPD programs for instructors and management staff
- 1.3: Revise and develop the existing curriculum and text book and introduction of new fields of study
- 1.4: Conduct and develop and conduct regular curriculum reviews to respond market needs

Target

- Improve the quality and relevance of training and standardize curriculum and certification.
- Ensure qualified Instructors and management staff.
- Publish and distribute 160,000 textbooks (72 courses)
- Conducted 5 research studies

4.2.6 Adult and Non-Formal Education

The Ministry has encountered several challenges on quality and relevance in the provision of non-formal education. There are no trained instructors. The system lacks a relevant curriculum for out of school youths. These challenges have a negative impact on the demand for non-formal education by target population. If the system is to attract the targeted population, the quality and relevance of the educational offered needs to be improved.

Objective 1: To improve learning outcomes in literacy and continuing education provisions for children and adults

Strategy:

- 1.1: Conduct needs survey and impact analysis to develop relevant and learner centered curriculum for literacy & continuing education

1.2 Organize writers workshops to prepare and print learning materials in local languages and English

Objective 2: To train and upgrade literacy and CEE facilitators, programs coordinators, supervisors, directors and community attendants/librarians

Strategy:

2.1. Build capacities of literacy facilitators and adult educators and program developers and coordinators through effective training methods and adequate remuneration schemes

Objective 3: To create literate environment by opening community reading rooms as part of the provision of literacy and continuing education programs

Strategy:

3.1: Create literate environment by increasing the number of community reading rooms, and further developing them into community learning centres (CLCs), by furnishing relevant learning material, furniture and enhancing the profile of community attendants (librarians)

Objective 4: To produce educational audio & video materials to promote learning and sensitize communities

Strategy:

3.1: Enhance adult & non-formal learning and sensitization via multi-media

Objective 5: Enhance research based planning and decision making

Strategy:

5.1: Conduct impact and needs assessment of the implementation of literacy, CEE and Continue Education

Objective 6: To improve adult and non-formal data collection and management to promote evidence based decisions

Strategy:

6.1: Establish adult education information network and data base (as part of EMIS) that capture all data of the different adult education providers in the country and build the capacity of the staff

Objective 7: To provide professional and material support to other adult education providers

Strategy:

7.1: Create linkages and collaborative support with all government and non-government adult education program providers

7.2: Conduct joint monitoring and supervision practices as well as produce evaluation reports for appropriate action and interventions

4.2.7 Teacher Education

Expansion of access to teacher education up to the level needed to meet the requirement for trained teachers requires infrastructure development in addition to alternative modes of training such as open and distance education and nonresidential training. Infrastructure needed includes expansion of library facilities, construction of special needs units in the teacher training institutes and other facilities. This, therefore, calls for a focused attention on increased infrastructure to facilitate the expansion in access.

Overall Objectives of Teacher Education

Analysis of the education sector clearly indicates that there is a **big challenge** in meeting teacher requirements at all levels during the next few years. It is certain that the provision of good quality education and training cannot be realized without an adequate supply of highly motivated and well-trained teachers. The main objective is to ensure that there is an adequate supply of qualified teachers for all areas and levels of the education system.

The specific interventions for teacher education are outlined below. In line with the projected increases in enrolments in the next five years, there is a need for far-reaching changes in the system of teacher training, development and support. Therefore, implementation of the five year plan need to address issues of recruitment, training, support and continuing professional development of the teaching force.

Objective 1: Upgrade the academic and professional capacity of teachers and Educational Managers

Strategy:

- 1.1: Provide certificate level in-service training
- 1.2: Upgrade certificate level teachers to diploma level
- 1.3: Upgrade Diploma holders to degree level
- 1.4: Upgrade Degree holders to master's level

Objective 2: Upgrade the academic qualification of the existing unqualified teachers

Strategy:

- 2.1: Provide summer training and self-study program to complete secondary education
- 2.2: Provide Open and Distance Learning Program (ODLP) to certificate and diploma level

Targets

The targets of teacher requirements to meet the projected enrolments for each level are shown in the following tables.

Tables 4.1-6.4 show teacher requirements for pre-primary, elementary, middle and secondary school levels. This requirement of teachers is based on enrolment projections identified above, an assumed reduction in teacher-pupil ratios, and an attrition rate of 5% per annum in the stock of teachers.

Table 4.14: Pre-primary Schools - Teacher Demand and Supply

| Teachers | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|--|------------|------------|------------|------------|------------|------------|
| Parameters: | | | | | | |
| Teachers/Section | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 |
| P/T | 37 | 35 | 33 | 32 | 31 | 29 |
| Demand: | | | | | | |
| Teachers required (with year start GER) | 1696 | 2041 | 2426 | 2866 | 3346 | 3888 |
| Increment Demand | 549 | 345 | 385 | 440 | 480 | 543 |
| Supply: | | | | | | |
| Stock (5% attrition) | 1,089 | 1,611 | 1,939 | 2,305 | 2,722 | 3,178 |
| New required teachers | 606 | 430 | 487 | 561 | 623 | 710 |

Table 4.15: Elementary Schools - Teacher Demand and Supply

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Teachers/Section | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| P/T | 42 | 42 | 45 | 44 | 44 | 43 |
| Demand: | | | | | | |
| Teachers required with year start GER | 8,300 | 8,426 | 7,924 | 8,345 | 8,771 | 9,235 |
| Increment Demand | 89 | 127 | 0 | 421 | 426 | 464 |
| Supply: | | | | | | |
| Stock (5% attrition) | 7,800 | 7,885 | 8,005 | 7,528 | 7,928 | 8,332 |
| New required teachers | 499 | 542 | (81) | 818 | 843 | 903 |

Table 4.16: Middle Schools - Teacher Demand and Supply

| | | | | | | |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Teachers | | | | | | |
| Parameters: | | | | | | |
| Teachers/Section | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| P/T | 48.4 | 47.8 | 47.2 | 46.6 | 46.0 | 45.5 |
| Demand: | | | | | | |
| Teachers required with year start GER | 3782 | 4208 | 4460 | 4549 | 4565 | 4649 |
| Increment Demand | 560 | 426 | 252 | 89 | 15 | 85 |
| Supply: | | | | | | |
| Stock (5% attrition) | 3061 | 3593 | 3997 | 4237 | 4322 | 4336 |
| New required teachers | 721 | 615 | 463 | 312 | 243 | 313 |

Table 4.17: Secondary Schools - Teacher Demand and Supply

| Teachers | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|--------------------|---------|---------|---------|---------|---------|---------|
| Parameters: | | | | | | |
| Teachers/Section | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| P/T | 56 | 47 | 45 | 43 | 40 | 36 |

| | | | | | | |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Demand: | | | | | | |
| Teachers required with year start GER | 1684 | 1977 | 2357 | 2810 | 3326 | 4072 |
| Increment Demand - domestic teachers | 178 | 293 | 380 | 453 | 516 | 746 |
| Supply domestic: | | | | | | |
| Stock (5% attrition) | 1431 | 1600 | 1878 | 2239 | 2670 | 3160 |
| New required teachers | 253 | 377 | 479 | 571 | 656 | 912 |

4.3 Priority III. System capacity and Management (Part I):

Overall objective

To ensure that the education sector delivers efficiently, a whole set of management systems and tools must be put in place over the long term. However, some of these are more urgently needed and will affect the success of the plan to a greater extent than others. The most urgently required management delivery systems that will be reviewed and reformed as required are the following:

4.3.1 Pre-Primary Education

Objective 1: Improve the Efficiency of programme implementation

Strategy:

- 1.1: Develop ECCE costed strategy plan
- 1.2: Identify the current situation of ECCE
- 1.3: Monitor the implementation of ECCE Curriculum

4.3.2 Primary Education

Objective 1: Improve the Efficiency of program implementation

Strategy:

- 1.1: Supervise and evaluate program implementation
- 1.2: Monitor and evaluate curriculum materials
- 1.3: Learning achievement surveyed and assessed

4.3.3 Middle Education

Objective 1: Enhance the efficiency of program implementation

Strategy:

- 1.1: Raise the awareness and knowledge of teachers, school directors and supervisors on the procedures, processes and outcomes of national examinations
- 1.2: Monitor the education delivery at schools (supervision visits)
- 1.3: Strengthen the monitoring and evaluation capacity of supervisors to assess schools performance (2 times a year)
- 1.4: Learning achievement surveyed and assessed
- 1.5: Monitor and evaluate curriculum and assessment implementations

4.3.4 Secondary Education

Objective 1: Improving efficiency of program implementation

Strategy:

- 1.1: Strengthen the monitoring and evaluation capacity of supervisors to assess schools performance (2 times a year)
- 1.2 Learning achievement surveyed and assessed

4.3.5 Adult and Non-Formal Education

Objective 1: To provide professional and material support to other adult education providers

Strategy:

- 1.1: Create linkages and collaborative support with all government and non-government adult education program providers
- 1.2: Conduct joint monitoring and supervision practices as well as produce evaluation reports for appropriate action and interventions

Objective 2: Strengthen monitoring and evaluation

Strategy:

- 2.1: Enhancing monitoring and supervision to ensure provision of quality adult and non-formal education

Objective 3: To enhance Staff professional development

Strategy:

- 3.1: Review and update policy , directives and guide lines
- 3.2: Organize in house workshops and short trainings on adult and non-formal education

4.3.6 Teacher Education

Objective 1: Enhance the human resource development capacity of MoE

Strategy:

- 1.1: Strengthen the planning and implementation capacity of MoE

Objective 2: Enhance the capacity of teacher training institution

Strategy:

- 2.1: Strengthen the teacher training program

4.3.7 Priority III. System capacity and Management (Part II):

Objective 1: Develop Organizational Framework of MOE institutions

Strategy:

- 1.1: Develop and review all sub-sector policy and strategy

- 1.2: Review, develop and update management Procedures, Rules and Regulations in relation to the respective systems for the three levels of MOE.
- 1.3: Establish a unit within the DTVET which oversees the activities of the non-formal training providers
- 1.4: Develop framework for establishing a National Coordinating Body for TVET system.
- 1.5: Develop the capacity of adult education program coordinators and supervisors
- 1.6: Review and update policy, directives and guide lines of adult education
- 1.7: Strengthen the capacity of adult and non-formal education personnel in planning and implementation (in house workshops and short trainings)

Objective 2: Develop Management Systems of MOE institutions

Strategy:

- 2.1: Develop a comprehensive and integrated Educational Management Information System (EMIS)
- 2.2: Strengthen TVET linkage with line ministries and stakeholders
- 2.3: Strengthen and enhance the assessment system and capacity of staff

Objective 3: Develop Institutional and Professional Development of teachers

Strategy:

- 3.1: Increase the output of new teachers
- 3.2: Develop the knowledge and skills required to manage the sector and subsectors at all levels through generic and professional development programs.
- 3.3: Develop the professional skill of MoE staff in planning, accounting, financial management, procurement and monitoring and evaluation
- 3.4: Strengthen Educational Research and Development practices in education for all sub sectors and at all levels of the sector

Objective 4: Enhance the information base for planning and decision making through research and Surveys

Strategy:

- 4.1: Improve evidence-based planning and decision making practices through surveys and studies

Objective 5: Enhance the research culture at zoba and sub-zoba level

Strategy:

- 5.1: Develop the capacity of staff at all levels on educational research methodology and household survey skills

Objective 6: Strengthen data collection process, analysis, reporting systems, including the systems for managing the flow of information.

Strategies:

6.1: Develop the capacity of data collection, analysis and reporting system

Objective 7: Upgrade the professional capacity of MOE staff at all levels

Strategies:

7.1 Professional capacity of MOE staff upgraded to various academic levels level

Objective 8: Enhance the capacity of MOE offices through the provision of logistics and equipment

Strategy:

8.1: Strengthen educational offices at all levels through the provision of equipment and supplies, communication means, and office spaces

Objective 9: Best practices on various educational programs shared through study tours

Strategy:

9.1: Best practices and experiences on various educational programs of other countries shared

Objective 10: Enhance working conditions through the building of new office spaces and store facilities in MOE and zoba locations.

Strategy:

10.1: Enhanced storage capacity of MOE

10.2: Improved and consolidated MOE Office

Objective 11: Enhance the production capacity of educational materials

Strategy:

11.1: The capacity of educational materials production workshops enhanced

Objective 12: Strengthen the production capacity of printing press

Strategy:

12.1: Installed new printing offset and the printing capacity strengthened

Objective 13: Strengthen the distribution efficiency of logistics and monitoring of education delivery through the procurement of trucks, vehicles and motor bicycles and related supplies

Strategy:

13.1 Improved disbursement and transportation capacity of logistical materials and monitoring of the delivery of education

Objective 14: Sector challenges identified and remedial actions taken, lessons learned documented for further action

Strategy:

14.1: The Implementation of ESP monitored and evaluated

4.4 Cross-Cutting Programmes

4.4.1 Special Needs and Inclusive Education

Special needs education is the education of students with special needs in a way that addresses the students' individual differences and needs. Ideally, this process involves the individually planned and systematically monitored arrangement of teaching procedures, adapted equipment and materials.

Objectives:

The SNE provision in General Education aims at enhancing access and quality (relevance) of education for 'learners with disabilities'. Identified objective for 2018-2022 are:

Objective 1: Enhance education access for children with disabilities at all levels

Strategy:

- 1.1: Strengthen special schools to outreach communities
- 1.2: Consolidate the existing special classes
- 1.3: Provide resources to special school to accommodate children with special needs
- 1.4: Strengthen SNE operational guides for enrolling and accommodating children with disabilities

Objective 2: Improve the quality of learning and learning outcomes for children with special needs

Strategy:

- 2.1: Modify and/or adapt curricula for educating children with various disabilities
- 2.2: Strengthen special school and special class capacity to accommodate learning needs and increase local production of educational materials

Objective 3: Enhance the capacity of teachers to accommodate children with special needs/disabilities

Strategy:

- 3.1: Increase the capacity (awareness) of teachers to accommodate learning needs of children with special needs/disabilities

Objective 4: Increase school-community partnership in support of SNE services

Strategy:

- 4.1: Awareness raising to promote children with disabilities access and home support for school SNE services

Objective 5: Improve institutional efficiency to monitor SNE program implementation

Strategy:

5.1: Assess access and quality opportunities of SNE services

5.2: Monitor the SNE program

4.4.2 Information and Communications Technology (ICT)

Objective 1: Expand and consolidate ICT facilities and services in schools

Strategy:

1.1: Setup ICT labs in schools equipped with computers, furniture, LAN, and other essential teaching/learning materials

1.2: Revitalize existing ICT labs with essential ICT resources

1.3: Setup e-learning facilities in schools

1.4: Equip school management and operations offices, departments and libraries with essential ICT facilities

Objective 2: Ensure equitable access to ICT services with Solar Power Systems in remote rural schools and education offices

Strategy:

2.1: Install solar power systems of 10 KW in rural schools with student population of 1000 and above

2.2: Install solar power systems of 5 KW in rural schools with student population below 1000

2.3: Install solar power systems of 5 KW in sub-zoba education offices that have no power supply

Objective 3: Revitalize and upgrade central MoE and Zoba education offices ICT facilities and services

Strategy:

3.1: Revitalize and upgrade the network infrastructure of the MoE

3.2: Establish network infrastructure and facilities in six zoba education offices

3.3: Establish internet connectivity, e-mail and website services for central and zoba education offices for integrated, efficient and timely educational planning and management

3.4: Establish a national EdTech Lab and e-learning center equipped with essential facilities and education portal

3.5: Revitalize the ICT training centers at central and regional education offices

Objective 4: Build human resources capacity in integration, management and utilization of ICT in Education

Strategy:

4.1: Build the capacity of ICT master trainers on the management and utilization of ICT-in-Education in schools

4.2: Build the capacity of education management and operations staff on utilization of ICT for educational planning and management

4.3: Build the capacity of mainstream subject teachers on the integration and utilization of ICT for teaching/learning and educational management

4.4: Build the capacity of solar energy technicians and equip them with essential tools and equipment for effective installation, servicing and maintenance

Objective 5: Establish and implement a system of Electronic Waste (E-waste) Management and safe disposal of Obsolete ICT equipment and accessories

Strategy:

5.1: Strengthen the planning and coordination of inventory and asset management, E-waste management, and safe disposal of obsolete ICT equipment and accessories

5.2: Ensure the implementation of safe, hazard-free and healthy E-waste management practices

Objective 6: Enhance the institutional capacity of the education sector in relation to the deployment, accessibility and utilization of ICT

Strategy:

6.1: Conduct national survey on the deployment, accessibility and utilization of ICT in teaching and learning, educational planning and management

6.2: Establish appropriate EMIS infrastructure for connecting schools, regional education offices and central MoE for effective and efficient management of information across the education sector

6.3: Establish and expand an SMS-based data collection, analysis and reporting system (Edu-Trac) for rapid school monitoring;

6.4: Assessment survey on the impact of ICT in improving quality of educational planning, management and students' learning and achievement

4.4.3 Education and Emergencies

Education in emergencies (EiE) was recognized as a key component of humanitarian response in Eritrea. In the Gash Barka and Northern and Southern Red-Sea Zoba which are a home for the nomadic and semi-nomadic communities are frequently affected with strong seasonal winds, and sand-storms which inflict heavy damages to school buildings, tearing away corrugated iron rooftops and destroying other school properties.

Objective 1: Implement emergency and disaster reduction policy and strategy

Strategy:

1.1: Advocated for the implementation of the emergency and disaster risk reduction strategy

Objective 2: Ensure that all children have access to a safe learning space before, during and after emergencies

Strategy:

- 2.1: Implement structural (e.g school buildings, playing grounds...) and non-structural mitigation measures in selected schools
- 2.2: Sensitize children and the school community on emergency and disaster preparedness and safety measures and opportunities through information sharing
- 2.3: Establish clear standards, maintain and enhance quality education for all through the provision of education during and after emergencies

Objective 3: Ensure that an effective coordination mechanism and information and data management system are in place and disseminated timely

Strategy:

- 3.1: Motivate the direct participation of key sectors, community and partners in activities that would help to build a disaster resilient community

Objective 4: Strengthen the capacity at national, zoba and sub-zoba, school and community levels to develop, implement and monitor education in emergency plans

Strategy:

- 4.1: Build the Emergency and Disaster Preparedness capacity of MOE officials, teachers and students at national, zoba, sub-zoba and school levels

Objective 5: Ensure the participation of all teachers and students and commitment of parents, communities, partners, in the implementation emergency and disaster risk reduction plan.

Strategy:

- 5.1: Carrying out Information, Education and Communication (IEC) activities in schools and their communities

4.4.4 Culture, Sport and Health

Health is an essential part in maintaining a healthy life and learning for students. Currently, there are some health interventions are made at the level of schools to address different health problems of students. However, further interventions will needed to identify children with health problems and to enhance an awareness on knowledge of diseases with their way of preventions and to design relevant interventions to address them effectively. Eritrea has made significant progress in the fight against the pandemic since independence. The government together with other stakeholders took determined action to reduce the spread of infection and mitigate the impacts of the pandemic on Eritrean society and economy.

Sport and culture have also significant importance in educational value. The role of Sports in the development of a society in general and an individual in particular cannot be disputed. Physical education and sports helps students in their physical progress and social well-being which makes them to be active in the school education. Moreover, creates an opportunities for students to learn actively, to work as a team with others, to meet new people and explore more talents.

Furthermore, physical education and sports provide more opportunity for individual and national recognition.

Cultural issue is to be recognized as essential aspect for identity, enhance creativity and maintain cultural diversity. The education system should support in respect and maintain cultural differences. Thus, education should underline the value of culture in providing moral, physical fitness and mental progress to students. Moreover, education system should able to direct learners to a better understanding of them and empowers them to participate fully in the development of the country.

Objective 1: Strengthen the Social and Behavioral Change

Strategy:

- 1.1: Raise the knowledge of teachers, PTSA members and students on HIV & AIDS, malaria TB and SRH prevention
- 1.2: Enhance the capacity of peer facilitators and coordinators
- 1.3: Develop a training manual on HIV, TB SRH and malaria control & pre elimination messages for junior, senior, TVET & Adult literacy program

Objective 2: Enhance the sport physical and material facilities of schools

Strategy:

- 2.1: Expand and renovate the schools physical sports facilities
- 2.2: Strengthen physical education of schools through the provision sport materials

4.4.5 Curriculum Review and National Standards for Quality Education

Objectives 1: Improve relevance of the curriculum

Strategy:

- 1.1 Review Curriculum of all levels
- 1.2 Finalization process and Printing of national Curriculum Framework

Objective 2: Introduction of National standards for quality education

Strategy:

- 2.1 Developing National standards for quality education
- 2.2 Printing and dissemination of National standards manual for quality education

CHAPTER 5

COSTING AND FINANCING

5.1 Introduction

The financial framework indicates the requirement of resources for the education sector for the implementation period of ESP. The estimation approach is used for the total financial resource entitled for the period of ESP implementation which is categorized in terms of recurrent and development costs.

The financial requirements of ESP for the period of 2018-2022 are calculated based on ESA prioritized strategy. The main focus of the strategy is to increase enrolment, increase access and equity, improve quality and improve capacity utilization. The government budget which is domestic resources mainly focused on salaries and personnel costs, as a result it needs some more educational inputs. Development partners have provided significant additional resources to the overall financial resources of the education sector. However, no adequate financial resources are available to fund the required financial resources as intended in national plans. Thus, the sector requires more funds to implement the planned programs in an efficient and effective manner.

5.2 The Fiscal Framework

Public expenditure are funded by domestic resources which is accommodated to recurrent expenditure which include wages and salaries, whereas the development expenditure include investment and project funded mainly by development partners. The domestic resources for education sector are project based on the public domestic resources on forecasting future GDP. Over these resources, the government will also continue to have access to financial resource for the implementation of programmes and projects from the development partners.

5.3 Enrolment Assumptions and Expenditure Projections

The expected enrolment is the main assumption for the projection of expenditure. The enrolment assumptions affects the cost of ESP in accordance to the number of classrooms required, demand of teachers, teacher training, textbooks, materials and other operational costs. Among others, pupil/teacher ratios at the different levels of the sector are very important for planning expenditure projection. Lower pupil/teacher ratio increases the demand of qualified teachers which implies higher enrolment and increases the expenditure on teachers' salary and teacher training.

5.4 Financing requirement

The forecast of government spending for education likely depends on how much of the total government budget is allocated to the sector. The education budget on top of operational cost

includes a significant investment to support access, quality and quality. To ensure a sustainable development program in the long term for the education sector, the financial sources from the government mainly revenue should cover at least the recurrent cost fully.

The total financial resources needed to attain the targets of the sector have been estimated for 2018 – 2022 in this plan. Cost projections have been formulated and calculated for all levels. The total required financial resource for the implementation period of ESP from 2018- 2022 is shown in Annex 2.

5.5 Funding Gap Analysis

Both the government budget and the financial commitments from development partners are determine the funding gap of the ESP implementation period. Based on these, the funding gap can be identified during planned period. Based on the financial analysis, a funding gap was calculated using the projections of funding available from the government and the development partners. The funding gap can be reduced by the following approaches:

- Improving the efficiency in all levels by using reliable estimates of student’s enrolments
- Improving the EMIS;
- Better placement of teachers;
- Reducing teacher absenteeism;
- Allocating and effective use of resources and materials such as textbooks and teaching materials;
- Giving more attention in priorities of the programs and
- Having effective action on efficiency and priorities.

A financial analysis compares the costs of the plan and the available funding in order to assess te affordability of the plan given availbale sources. It also enables the country to determine whether there is need to scale down and at what point in the planning horizon this should be done. It also acts as a basis fo resource mobilization.

The total projected expenditures for education include all staff costs, recurrent expenditures and development expenditures and include programmes and activities foreseen in the action plan. The total for 2018 fiscal years corresponds to the allocations to MoE in the current government budget. This expenditure should continue to increase after 2022 in order to facilitate the long-term development of the system.

As indicated in Education Sector Analysis, table 5.1 below shows, both primary and secondary education has benefited more from recurrent expenditure, whereas middle school, TVET and Adult education have had small percentages of recurrent expenditure. Middle level’s recurrent expenditure decreased from 8.83% in 2013 to 5.53% in 2016. The recurrent expenditure for secondary education also declined from 29.63% in 2015 to 23.58% in 2016. However, TVET recurrent expenditure increased slightly from 6.63% in 2013 to 6.90% in 2016, Adult Education

recurrent expenditure increased significantly from 1.95% in 2013 to 6.72% in 2016. Similarly, primary education recurrent expenditure increased from 25% in 2013% to 29.91% in 2016. The main reason for increasing the share of secondary education is the huge cost of living and learning for students in boarding schools. Similarly, the increasing share of primary education indicates the government’ commitment to expand access to primary education.

Moreover, table 5.1 below shows that the development expenditure on public education was not allocated to all sub-sectors of education in the years of 2013 and 2014, but only to TVET with 10.09% and 38.48 respectively, and adult education with 1.05% in 2014. The share of development expenditure for TVET then dropped to 7.23% and 5.41% in 2015 and 2016 respectively. Similarly, for adult education it declined to 3.23% and 1.47% in 2015 and 2016 respectively. On the other hand, while primary education obtained 0.12% and 4.60%, middle school education obtained 0.25% and 1.49% in 2015 and 2016 respectively for development expenditure. Nonetheless, secondary education did not have any share in development expenditure during 2013 – 2016. Overall, this reflects that the government budget allocation for education has mainly been focused on recurrent expenditure.

Table 5.1: Percentage Distribution of Public Education Expenditure, by Nature and Subsector, 2013-2016

| Sub-sector | Recurrent | | | | Development | | | |
|------------------|-----------|--------|--------|--------|-------------|--------|-------|-------|
| | 2013 | 2014 | 2015 | 2016 | 2013 | 2014 | 2015 | 2016 |
| Primary | 25.00% | 24.57% | 27.27% | 29.91% | | | 0.12% | 4.60% |
| Middle | 8.83% | 8.23% | 8.21% | 5.53% | | | 0.25% | 1.49% |
| Secondary | 29.63% | 28.35% | 26.68% | 23.58% | | | | |
| TVET | 6.63% | 6.67% | 7.61% | 6.90% | 10.09% | 38.48% | 7.23% | 5.41% |
| Adult | 1.95% | 2.08% | 2.23% | 6.72% | | 1.05% | 3.23% | 1.47% |

Source: Ministry of Finance

Table 5.2: Potential budget, projected costs and financing gap (*in thousands USD*)

| | 2018 | 2019 | 2020 | 2021 | 2021 | 2022 |
|---|------|------|------|------|------|------|
| GDP Growth | | | | | | |
| Education as % of Govt Recurrent budget | | | | | | |
| Education as % of Govt development budget | | | | | | |
| MoE Potential Budget | | | | | | |
| MoE potential recurrent budget | | | | | | |
| MoE potential development budget | | | | | | |
| of which funding by development partners | | | | | | |
| MoE potential budget | | | | | | |
| Projected Expenditures | | | | | | |
| ESP recurrent projected costs | | | | | | |
| ESP development projected costs | | | | | | |
| ESP projected costs | | | | | | |
| Financing Gap | | | | | | |
| Financing gap on recurrent budget | | | | | | |
| Financing gap on development budget, domestic resources only | | | | | | |
| Expected financing of development budget by development partners | | | | | | |
| Remaining financing gap total | | | | | | |
| Financing gap as % of potential budget | | | | | | |

Table 5.3: Projected Government expenditure for Education (in thousands USD)

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|
| Recurrent Expenditure | | | | | |
| Pre-Primary | | | | | |
| Primary | | | | | |
| Middle | | | | | |
| Secondary | | | | | |
| Adult Education | | | | | |
| TVET | | | | | |
| Teacher Education | | | | | |
| Special Needs and Inclusive Education | | | | | |
| Information and Communication Technology (ICT) | | | | | |
| Education in Emergencies | | | | | |
| Supporting System | | | | | |
| Sport, Culture and Health | | | | | |
| Capacity Building | | | | | |
| Procurement for the MoE | | | | | |
| Total Recurrent Expenditure | | | | | |
| Development expenditures | | | | | |
| Pre-Primary | | | | | |
| Primary | | | | | |
| Middle | | | | | |
| Secondary | | | | | |
| Adult Education | | | | | |
| TVET | | | | | |
| Teacher Education | | | | | |
| Special Needs and Inclusive Education | | | | | |
| Information and Communication Technology (ICT) | | | | | |
| Education in Emergencies | | | | | |
| Supporting System | | | | | |
| Sport, Culture and Health | | | | | |
| Capacity Building | | | | | |
| Procurement for the MoE | | | | | |
| Total Development expenditures | | | | | |
| Total Projected Cost | | | | | |

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| Other expenditures on recurrent budget | | | | | |
| Total Recurrent expenditures | | | | | |
| Total Development expenditures | | | | | |
| Total Projected Cost | | | | | |

CHAPTER 6

IMPLEMENTAION, MONITORING AND EVALUATION FRAMEWORK

Framework Overview

The implementation, monitoring and evaluation framework for ESP specifies what will be the responsibilities of different actors in implementing ESP and how; through which tools and by whom ESP will be monitored and evaluated.

The framework covers a number of agencies, including the MOE, the Education Working group and regional and sub-regional education offices. Each office has both accountability and improvement functions. The framework is designed to support all agencies to make choices to adjust where necessary the activities and strategies pursued. At a higher level these exercises can inform adjustments to the strategic direction of the education system. Monitoring is specifically required on a regular basis against the objectives, outputs and activities in the ESP. This framework is based on clear expectations of performance and a set of linked implementation, monitoring and evaluation exercises. Key performance indicators have been identified in the ESP to monitor progress of priority outcomes at the system level. These indicators focus on participation, equity, quality and learning outcomes, in line with the priorities of the education and training system in Eritrea, which are to:

- Provide equal opportunities and participation for all, with special attention to disadvantaged groups;
- Deliver quality education that meets the diverse learning needs of all children, youth and adults;
- Develop competent citizens who contribute to social, economic, political and cultural development through creation and transfer of knowledge and technology;
- Promote effective leadership, management and governance at all levels in order to achieve educational goals by mobilizing and using resources efficiently; assist children, youth and adults to share common values and experiences and to embrace diversity.

6.1 Implementation of ESP

The overall objective of the implementation framework of the ESP is to ensure that the plan gets implemented fully, on time and within budget. This requires, inter alia, an effective administrative structure, efficient procedures, capable human resources and sufficient financing for implementation. Coordinating mechanism will be put in place, to ensure that implementation is carried out in the spirit of the overarching ESP.

The implementation framework for the plan is built on the following basic principles:

- Administrative and operational functions are concentrated in one place, such as expertise for procurement, will be centralized;
- Clear accountabilities;
- Units authorized to act with sufficient resources to do so;
- Maximum use of existing structures, suitably strengthened, so as to avoid overlap;
- Rationalization and simplification of procedures where possible.

Key implementers of the plan will comprise the central MOE along with the zoba and local (sub-zoba) education offices. The plan also calls for a comprehensive, cross government approach. MOE will be assisted by other government ministries, chiefly the Ministry of National Development, Ministry of Finance, and Ministry of Public Works together with regional administrations. These stakeholders are expected to play complementary role in promoting the education plan based on their comparative agenda. The Ministry of Education will play its lead role in coordinating with all stakeholders of joint planning, implementation, monitoring and evaluation of programs designed within the context of the ESP.

Implementation Structure and policies

The central MOE and Zoba education offices are playing a great role in planning, monitoring and evaluation which support in ensuring the equity and quality of the education system within an overall framework. In the education system of the country, there is a steering committee, annual review and regular consultation with various stakeholders to monitor the progress of the implementation against the plan objectives.

The MOE, EWG and regional and sub-regional education offices each have important roles to play in planning, implementation, monitoring and evaluation, in order to ensure a balanced and equitable development of the education sector. The latest decentralization reform, which started over a decade ago, has transferred important responsibilities for general education to regional education offices. These offices now exercise their responsibilities, with support from regional administration offices, within an overall framework developed at the central level.

The effectiveness of this decentralization could be strengthened through the organizational improvement by setting clear function to the expected input of the staff at all levels. These strengthened the links between operational units and have helped to increase efficiency by identifying the human resource requirements for each task.

Coherent and rational implementation of ESP will rely on the availability of operational plans linked to ESP strategic objectives. These annual operational plans should identify

responsibilities, budget implications and financing sources. Thus, they help to identify what should be done and measured and allow officers to monitor the performance of the implementation against strategic objectives. The strategic planned activities should be seen critically to ensure the alignment with stated strategic objectives. Therefore, the framework should take into account the expected specified outputs, activities and targets to be achieved during the year and the indicators used to monitor the progress of implementation.

The ESP intends to use results-based approach to monitor, review and evaluate the outcome. This approach will focus on the outcomes of the strategic achievement against the key indicators of the ESP which apply to all levels of education sector.

The Ministry of Education (MOE)

The MOE will be responsible for the policy development and implementation of strategic, legal, and institutional aspects of the plan and will retain oversight of these aspects. The MOE will also retain responsibility for the management of the entire implementation process of the plan.

H.E. Minister of Education

The education policy framework, approval of new education policy and reporting on the education policy outcomes to civil society lies with the minister.

Education Working Group (EWG)

The Education Working Group plays an advisory role in relation to policy, implementation and monitoring. It has an important coordination and information sharing function in that it brings together the education stakeholders who are operating in the sector (government, development partners, civil society, NGOs, and other private institutions) and helps to ensure that there is coherence and complementarity. Members of EWG meet regularly.

Members of EWG comprise:

- Director General of Administration and Finance, MOE (Chair)
- Directors and heads of allied MOE branches
- UNICEF (Co-chair and Grant Agent)
- Representatives from Civil Societies
- Representatives from development partners (EU)
- A representative from the teachers' union
- Representatives from the private sector

The Steering Committee

The implementation management function will be executed by a steering committee. The steering committee is chaired by the Minister of Education and is composed of five MOE Director Generals. Thus, all divisions and units of the MOE involved in planning and

implementation will be represented. This committee will meet monthly or more frequently as dictated by the pace of work. The steering committee's functions are the following:

- Foster a common understanding of the plan goals and policies;
- Provide strategic oversight;
- Review and approve annual work plans and budgets;
- Coordinate the various branches of the MOE in plan implementation;
- Assess the performance of the MOE in plan implementation;
- Take corrective actions to avoid or overcome problems;
- Report on program implementation to higher levels of government.

MOE Departments, Divisions and Units

- The implementation/execution functions of the MOE will be undertaken by the respective structures of the MOE within which the substantive, technical aspects of the plan will be mainstreamed. These structures include the various divisions and units at headquarters, Zoba offices, Sub-zoba offices and schools.
- The responsibilities generally are focused on the substantive (i.e., the educational) aspects of the plan. The MOE Departments will define requirements, and will then be passed to the Department of Administration and Finance for actual procurement. The MOE Divisions and Units at all levels of the education sector will be responsible for operating their specific activities of the plan. These Divisions and Units will also be responsible for supervising their activities. They will be responsible generally for developing curricula and teaching programs, selecting or developing instructional materials, designing, organizing and carrying out training programs, etc. In addition, they will monitor and evaluate their respective activities, help prepare annual work plans, and report to the higher-level authority on their activities, as needed.
- An Annual Work Plan and Budget (AWPB) will be prepared each year in November, consistent with overall plan and component objectives and design. As the activities of the plan were defined during the preparation stage, the implementation plan for the activities may need to be modified during the course of the ESP, both in terms of content and timescale, in line with the experience and capacity gained in Plan implementation. Thus, an AWPB will need to be developed every year. The planning process will embody consideration of past performance, including results, and planned activities for the coming year. The Departments of MOE, in close collaboration with Zoba education offices, will assume overall responsibility for preparing the AWPB, which once drafted will be approved by the Steering Committee.

6.2 Monitoring and Evaluation

Monitoring and evaluation (M&E) are essential areas in ensuring the success of the education performance. It incorporates several processes which help to assess and evaluate how the sector

programmes are being implemented and realize the impact of the programmes. Accordingly, it helps to identify the lessons learned in developing new plans for the education sector. To have a better system of monitoring and evaluation within the ministry, there should be continuous monitoring, participatory reviews, independent evaluations, joint monitoring of stakeholders and development partners and thus to ensure quality of educational services and enhance better performance within the education system.

In line with the results-based approach adopted under ESP it is intended to move to an outcome based monitoring, review and evaluation procedure and to strengthen evaluation in addition to monitoring and review processes. This outcome-based approach will focus on the achievement of strategic education outcomes. The programme components elsewhere in ESP also include objectives and indicators, which are effectively intermediate outcomes. These objectives, indicators and intermediate outcomes will also be considered in monitoring the annual operational plans. The monitoring, review and evaluation procedure will be an interrelated and sequential chain of continuous monitoring, annual reviews, short-term and system-wide evaluations. The monitoring, review and evaluation procedure will apply to all levels and sub-sectors.

In order to assess whether the development objectives of the ESP are being met, a monitoring and evaluation system will be established in the MOE. Monitoring and evaluation of project performance will be systematically carried out during the life of the plan and integrated into the ongoing operation of the plan at all levels and used to provide feedback, encourage innovation, team building, and project ownership. As the plan aims to contribute to sectoral goals by carrying out specific activities, MOE will ensure the timely implementation of the planned activities, which are critical to meeting the plan's development objectives, and assess the overall performance of the education sector as a whole and improvements in the sectoral indicators.

The foundation of the programme monitoring and reporting systems will be the Logical Framework and its key performance indicators.

The implementing departments of MOE will collect evidence required to develop baseline data on each component. With the support of the Research and Statistics Division of the Department of Research and Human Resources Development, all Departments will contribute respective component baselines into a comprehensive baseline against which the monitoring performance indicators will be applied.

Monitoring and evaluation of ESP performance will be carried out by the MOE at all levels of the sector, in close collaboration with the Steering Committee which will have overall responsibility for the management and coordination of this important activity.

Currently, the education system has uncoordinated M&E system, it lacks effectiveness of sharing results and poor data collection systems which impede the ministry to make informed decision. Thus, the ESP is expected to enhance effective use of M&E by harmonizing the progress of sector plan and a guide for identified indicators which measure the success in education.

Implementation, monitoring and evaluation Framework overview

The implementation of M&E framework for ESP indicates the functions and responsibilities of different bodies and how the ESP will be monitored and evaluated. The M&E framework covers the MOE and Zoba Education offices and each office has both accountability and improvement functions. The framework is intended to support all education parts to have a clear understanding on how the strategies and activities are implemented and reviewed. Monitoring is usually required on a regular basis in relation to the objectives, strategies and activities mentioned in ESP. Key indicators have been identified in the ESP to monitor and follow the progress of priority outcomes. The identified indicators concentrate on access, equity, quality and learning outcomes consistent with the priorities of the education system. Thus, the indicators will rely on providing equal opportunities and participation for all citizens, delivering quality education that meets learning needs, produce competent students who contribute to social, political and economic development and promote effective leadership and governance at all levels of education. This framework will help all education parts to follow adequate evidence on performance achievement.

Sources of data for monitoring plan performance (particularly EMIS)

For all indicators in the ESP, the source of monitoring data has been identified. This includes those indicators for which no data are as yet collected or reported. EMIS will be the primary source for monitoring data for each sub-sector during ESP. EMIS should continue to be strengthened during the period of ESP to have comprehensive aggregate data. There is an EMIS focal person in each regional MOE offices and data are aggregated to produce nation-wide statistics on a range of education indicators. Further strengthening of the Data is done in collaboration with National Statistics Office of the Ministry of National Development.

EMIS will expand during ESP to integrate non-formal schools and the indicators will be aligned with SDG goals. Where it would need to be more efficient, continuous capacity development programmes will be conducted. Continuous joint field monitoring will be strengthened with all pertinent partners and stakeholders. To ensure whether relevant data are collected and recorded to the monitoring of ESP strategic objectives and to reduce the burden on enumerators, EMIS questionnaire will be harmonized. Collection of appropriate information is mainly helpful to measure the progress of the implementation.

Additional surveys, studies and evaluations, such as OOSC and MLA will be supported or commissioned where necessary. Reports of these studies and periodic reviews will serve as source of monitoring data.

Where there are no existing data captured for an indicator, the MOE will explore how suitable data might be gathered. If an appropriate methodology can be developed, to coordinate short-term surveys or reports, the necessary information will be collected as soon after plan implementation as possible and a baseline established. Consultation with regions and sub-regions will be undertaken to check on the feasibility of gathering and using data to measure those particular indicators. Targets for subsequent years of the plan will be set based on the baseline established. If appropriate information to measure progress cannot be collected, the indicator will either be redesigned or dropped.

Routine monitoring at national and decentralized levels

Plan implementation will be monitored on a routine basis through monthly meetings, based on the targets and indicators contained in the ESP and in the Annual Operational Plans. Regular quarterly monitoring reports will be produced by the MOE and regional bodies (including TVET agencies) against the Key Performance Indicators (KPIs) set out in this chapter of ESP. They will include consolidated information from short, standardized, written performance reports that will be produced by the implementing units at quarterly intervals using the guidelines and tools provided to them by the M&E and quality assurance section.

Annual Review Meetings

The Annual Review Meeting will offer the opportunity for government and other stakeholders to assess achievements and shortcomings of plan implementation across the nation and to agree on improvements in order to reach the strategic objectives elaborated in the ESP. Each Annual Review Meeting will be timed in such a way that it can serve as a basis for preparing the Annual Operational Plans and budgets for the following year. Reports from each evaluation are helpful to make necessary adjustments during the implementation period and for the next sector plan.

Key Performance Indicators (KPIs)

The collection, use and reporting of performance information against KPIs is an essential aspect of the framework for monitoring and evaluation. A set of KPIs will be used to monitor performance against the main outcomes expected under the ESP. The design of the KPIs relates directly to the agreed strategic education outcomes. These indicators are taken from the targets included in priority programme matrices and include indicators previously identified under the ESP (to allow for a continued monitoring) and others of particular relevance to the ESP. The indicators are designed based on reliable data to ensure the accuracy and credibility of the report to improve access, equity, quality, relevance as well as institutional capacity and management of the education system.

The KPIs are relatively few in number (to assist in ease of administration and in recognition that the capacity of the monitoring and evaluation system is still being built); are based on reliable data and data collection methods or tools (to ensure the accuracy and credibility of the reporting

and simplicity of data collection); and reflect the range of different goals of the ESP (such as improved access, equity, relevance, quality and management), so that comprehensive system progress is being monitored. The KPI table includes targets for each year of the ESP, disaggregated by gender where appropriate.

| Key performance indicator | Baseline 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------------------------------|--|---|---|---|---|---|
| Access | | | | | | |
| Pre-primary GER NER | 25.2 21.2 | 28.2 22.9 | 31.1 24.7 | 34.1 26.5 | 37.0 28.2 | 40 30 |
| Primary GER NER | 97.3 84.4 | 95.3 85.5 | 94.7 86.6 | 95.2 87.7 | 96.5 88.9 | 97.2 90 |
| Middle GER NER | 92.6 46.4 | 99.3 49.1 | 101.1 51.8 | 99.4 54.5 | 95.8 57.3 | 93.9 60 |
| Secondary GER NER | 29.1 25.0 | 32.8 28.0 | 37.5 31.0 | 43.0 34.0 | 49.1 37.0 | 54.8 40 |
| Literacy rate (15 years +) | 80 | 82 | 84 | 86 | 88 | 90 |
| TVET (%intake rate) | 5.3 | 6.1 | 7.2 | 8.1 | 9.3 | 10.0 |
| Transition rate | | | | | | |
| Middle | 87.3 | 88.2 | 89.0 | 89.9 | 90.7 | 91.7 |
| Secondary | 43.8 | 47.67 | 51.53 | 55.40 | 59.27 | 63.13 |
| Quality | | | | | | |
| Learning Outcome (MML)grade 3 | Minimum Mastery Level (MML) -Grade 3: 30%; Grade 5: 25% Desired Mastery Level (DML) - Grade 3: 11%; Grade 5: 8% | Minimum Mastery Level (MML) -Grade 3: 32%; Grade 5: 28% Desired Mastery Level (DML) - Grade 3: 15%; Grade 5: 12% | Minimum Mastery Level (MML) -Grade 3: 35%; Grade 5: 30% Desired Mastery Level (DML) - Grade 3: 22%; Grade 5: 15% | Minimum Mastery Level (MML) -Grade 3: 37%; Grade 5: 35% Desired Mastery Level (DML) - Grade 3: 26%; Grade 5: 18% | Minimum Mastery Level (MML) -Grade 3: 38%; Grade 5: 38% Desired Mastery Level (DML) - Grade 3: 28%; Grade 5: 22% | Minimum Mastery Level (MML) -Grade 3: 50%; Grade 5: 40% Desired Mastery Level (DML) - Grade 3: 30%; Grade 5: 25% |
| Pupil/Section pre-primary | 38.9 | 38.1 | 37.3 | 36.5 | 35.8 | 35 |

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|---|-------|------|------|------|------|------|
| Pupil/Section primary | 45.5 | 45.2 | 44.9 | 44.6 | 44.3 | 44 |
| Pupil/ Section middle | 53.3 | 52.6 | 52.0 | 51.3 | 50.7 | 50 |
| Pupil/ Section Secondary | 62.0 | 61 | 60 | 59.4 | 58.8 | 55 |
| Pre-primary teachers required | 1696 | 2041 | 2426 | 2866 | 3346 | 3888 |
| Primary teachers required | 8,300 | 8426 | 8667 | 9052 | 9520 | 9976 |
| Middle teachers required | 3782 | 4208 | 4460 | 4549 | 4565 | 4649 |
| Secondary teachers required | 1684 | 1977 | 2357 | 2810 | 3326 | 4072 |
| TIVET teachers required | 450 | 600 | 822 | 1044 | 1331 | 1683 |
| Equity | | | | | | |
| GPI in pre-primary (index) | 0.93 | 0.95 | 0.97 | 0.98 | 0.99 | 1.00 |
| GPI in Primary (index) | 0.82 | 0.85 | 0.88 | 0.90 | 0.92 | 0.95 |
| GPI in Middle (index) | 0.85 | 0.86 | 0.87 | 0.88 | 0.90 | 0.92 |
| GPI in secondary | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | 0.97 |
| % females compared to males TVET system | 43.4 | 44.8 | 45.0 | 46.1 | 47.4 | 48.0 |

IMPROVE ACCESS AND EQUITY

| Intervention Logic | Objectively verifiable indicators | Means of verification | Assumptions |
|---|--|---|---|
| I. IMPROVE ACCESS AND EQUITY | | | |
| Pre-Primary Level Education | | | |
| <p>1. Expand equitable access of ECCE services to all, including vulnerable communities and groups</p> <p>1.1 Increase preprimary enrolment by expanding RCCC and KGs annexed classes within primary school premises greatly targeted to rural and remote areas</p> <p>1.2 Sensitize communities on the importance of ECCE</p> | <ul style="list-style-type: none"> • Number of ECCE class rooms constructed and made functional in primary school premises • Number of RCC centres established | <ul style="list-style-type: none"> ▪ Zoba education branch (and EMIS) enrollment annual statistics ▪ Division (CPDD/ECCE), DAF reports ▪ Division (CPDD/SNE) reports ▪ Records of training ▪ Zoba education branch reports ▪ Division (CPDD/ECCE) reports ▪ Records of training | <p>Commitment of MOE's departments and regional offices; zoba administration</p> |
| <p>2. Ensure holistic development of children 0-6 years</p> <p>2.1 Expand parenting intervention in adult literacy centers</p> <p>2.2 Enhance capacity of adult education facilitators to provide parenting education to parents/care givers</p> <p>2.3 Raise the level of awareness of stakeholders and communities through advocacy and media</p> | <ul style="list-style-type: none"> ▪ Number of people sensitized on the importance of ECCE in 20 sub zobas ▪ Number of existing and new ECCE and CCG teachers received refresher training on children care and pedagogy ▪ % of ECCE directors and supervisors received short training on management of ECCE | <ul style="list-style-type: none"> ▪ Zoba education branch report ▪ Division (CPDD/ECCE) reports ▪ Records of training ▪ Zoba education branch report ▪ Division (CPDD/ECCE) reports ▪ Records of training ▪ Zoba education branch and EMIS reports ▪ Division (CPDD/ECCE) reports ▪ Records of training | <p>Commitment of MOE's departments and regional offices; regional administration</p> |
| Primary Level Education | | | |
| <p>1. Increase enrolment in primary education to ensure equitable access to all</p> <p>1.1 Expand learning spaces and rehabilitate existing classrooms</p> | <ul style="list-style-type: none"> • Refresher training of 600 existing teachers in nomadic schools • Procurement of furniture for existing 25 nomadic schools • Transferring incentive budget to zobas • Sensitization of communities in 15 Sub Zobas | <ul style="list-style-type: none"> • Reports on the implementation of training, • Report on procurement | <ul style="list-style-type: none"> • Commitment of government for the recurrent budget |

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| <p>1.2 Recruit and train new teachers on mother tongue education to meet the additional enrolment</p> <p>1.3 Recruit and train more female teachers</p> <p>1.4 Enhance the participation of girls and other disadvantaged groups by introducing incentive schemes</p> <p>1.5 Raise the awareness of community on the value of education with emphasis on girls enrollment</p> <p>1.6. Strengthening existing nomadic school</p> <p>1.7 Pre-service training of student teachers</p> | | <p>and submission of furniture to central warehouse</p> <ul style="list-style-type: none"> • Reports on the implementation community sensitization • Different reports from Zobas on the distribution of incentives to students and their impacts on enrolment and participation | <ul style="list-style-type: none"> • Commitment of Sub Zoba Administrators and other stakeholders in the community sensitization • Efficient procurement system in place |
| Middle Level Education | | | |
| <p>1. Increase enrolment and provide equitable access to all middle school age children</p> <p>1.1 Expand learning spaces</p> <p>1.2 Rehabilitating existing classrooms</p> <p>1.3 Raise the awareness of community on the value of education with emphasis on girls enrollment</p> <p>1.4 Enhance the participation of girls and other disadvantaged groups by introducing incentive schemes</p> <p>1.5 Waive any financial expenses demanded by school for the poor and other disadvantaged groups</p> | <ul style="list-style-type: none"> • Number of classrooms constructed • Number of schools rehabilitated • Number of sensitized participants • Number of beneficiaries • Official circular | <ul style="list-style-type: none"> • Engineer and REO reports • Reports of REO and facilitator • Pay roll report • School report on charges waived | |

| Secondary Level Education | | | |
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| <p>1 Increase equitable access secondary education system</p> <p>1.1 Expand learning spaces and rehabilitate existing classrooms Provision of incentive schemes for girls and other disadvantaged children</p> <p>1.2 Enhance the participation of girls and other disadvantaged groups by introducing incentive schemes</p> <p>1.3 Raise the awareness of community on the value of education with emphasis on girls enrollment</p> | <ul style="list-style-type: none"> • Number of new schools constructed • To be worked out by RHRD • Number of rehabilitated schools • Percentage of rehabilitation | <ul style="list-style-type: none"> • Availability of newly constructed schools • Procurement report • Progress report • Availability of - rehabilitated schools • Procurement report • Progress report | <ul style="list-style-type: none"> • Ministry's commitment to develop quality of learning and teaching process |
| TVET Education | | | |
| <p>1. Expand equitable access to technical vocational education and training.</p> <p>1.1 Revitalize and expand the capacity of the existing four TVET schools.</p> <p>1.2 Expand the provision of technical and vocational education and training through the construction of four TVET schools.</p> <p>1.3 Establish three new Skill Development Centers in three zobas.</p> | <ul style="list-style-type: none"> • Four new TVET schools constructed and equipped with necessary equipment, tools and teaching materials, dormitories, cafeteria and other necessary facilities and 1700 students enrolled to TVET schools in five year time. • Five TVET schools rehabilitated, expanded and equipped with necessary equipment, tools and teaching materials, dormitories, cafeteria and other necessary facilities and 1,380 students got access annually. • 3 Skill Development Centers constructed and equipped in three zobas and 600 trainees got access to skills training per cycle (This number is not included in the formal TVET enrolment). | <ul style="list-style-type: none"> • Engineers' reports and payment certificates. • Schools actually located (physical structures) i.e. erecting of the schools. • Skill Development Centers (SDC) records and supervision reports. • Procurement officer reports on both equipment and materials. • TVET Management and School reports. | <ul style="list-style-type: none"> • Sustained Government's commitment to expand TVET. • Availability of building materials in the local market. |

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| Adult and Non-Formal Education | | | |
| <p>1. Improve access in adult literacy, CEE and continuing education programs</p> <p>1.1. Identify and develop cost effective mechanisms of expanding and enhancing CEE learning centers by undertaking feasibility study (mapping assessment)</p> <p>1.2 Expand and enhance adult literacy and CEE programs</p> <p>1.3 Expand and consolidate continuing education program by maximizing proper utilization of available resources in formal schools</p> | <ul style="list-style-type: none"> • 120 new CEE learning centers established (semi permanent building) and about 6000 new out of school children got access annually. Total 600 learning centers in four years(2019 – 2022) • CEE learning centers increased by more than 50 percent annually (taking 107 centers in 2017 as base) from 2019 • More than 80 percent of the already identified about 600 villages got access to adult literacy and CEE until 2022 • Some literacy and CEE graduates got opportunity to join adult vocational training. • Access created for competent secondary school students to join TVET schools and Teacher Training Institutions • Adult vocational skills training introduced in selected areas and expanded to all zobas • 130 Solar powered middle and high schools start providing evening programs creating learning opportunities mainly in semi urban and rural localities | <ul style="list-style-type: none"> • Engineers’ reports • Supervision report • Zoba annual report • Literacy center documents and records • Procurement officer report | <ul style="list-style-type: none"> • Sustained Government commitment. • Strong cooperation of partners and stakeholders. • Organized and continuous sensitization. • Community and parents full cooperation • Sustained Government commitment. • Fair balance of supply and demand • Government |

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| | | | <p>and relevant agencies committed in supporting learners and implementers</p> <ul style="list-style-type: none"> • Availability of evening schools |
| <p>2. Narrow gender disparity in literacy CEE and continuing education programs</p> <p>2.1. Organize community and parents awareness raising and sensitization activities focusing on the importance of girls education</p> <p>2.2. Introduce incentive schemes and awards to attract beneficiaries and especially girls</p> <p>2.3: Enhance parenting education to encourage and raise interest of parents and community</p> | <ul style="list-style-type: none"> • Female participation in adult and out of school literacy program sustained and enhanced (as to 2016 report -more than 80% in literacy and about 45% in CEE) • Gender literacy gap reduced to less than 10 %. By 2022 • Male participation in adult literacy and female participation in CEE and continuing education programs increased | <ul style="list-style-type: none"> • Annual zoba reports • Assessment and supervision reports | <ul style="list-style-type: none"> • Commitment of MOE's officials and regional officers |
| <p>3. Raise public awareness and sensitizations</p> <p>3.1: Enhance the awareness of society on the importance of literacy and continuing education program for adults and out of school children</p> <p>3.2 Establish effective collaboration and partnership with stakeholders and partners</p> <p>3.3 organize workshops, conferences and meetings on the occasion of Literacy Day</p> | <ul style="list-style-type: none"> • Awareness and understanding about the importance of adult and non-formal education improved and sustained with the result of improvement in enrollment & retention in adult and CEE programs • Partners and beneficiaries participation and contribution increased. • Communication materials produced (radio & TV spots, leaflets, posters etc) and disseminated to raise awareness and understanding • In majority of the 600 villages with no access to literacy awareness and sensitization practices provided resulting in creating access and enrolments in adult literacy and CEE and especially girls in CEE centers. | <ul style="list-style-type: none"> • Meetings and workshops reports • Produced & distributed communication materials. • Broadcasted radio and TV promotion materials. • Reports of the award provided | <ul style="list-style-type: none"> • Government commitment and strong collaboration of stakeholders. |

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| | <ul style="list-style-type: none"> • International Literacy Day celebrated annually at national, zoba, Kebabi/community levels • motivational materials such as brochure, booklets, T-shirts, posters etc focusing prepared/procured and used on the importance of literacy for out of school children and illiterate adults , as well as on sustaining achievements and creating literate environment etc • Motivational materials such as • Awards provided for successful & exemplary adult literacy and CEE learners. | | |
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| Intervention Logic | Objectively verifiable indicators | Means of verification | Assumptions |
|--|--|--|--|
| I. IMPROVE QUALITY AND RELEVANCE | | | |
| Pre-Primary Level Education | | | |
| 1. Improve the quality of ECCE teaching and learning practices 1.1 Enhance the professional capacity of pre-primary teachers, directors and supervisors | Number of ECCE and RCC centers furnished | <ul style="list-style-type: none"> ▪ Division (CPDD/ECCE) reports ▪ Records of training | Commitment of MOE's departments and regional offices; MoH and zoba administration |
| 2. Strengthening quality of ECCE services 2.1 Equip ECCE Resource centers 2.2 Revitalize existing ECCE and RCC with support of basic learning materials | <ul style="list-style-type: none"> ▪ Number of ECCE and RCC centres equipped. ▪ Number of ECCE teachers and community caregivers (CCGs) trained | <ul style="list-style-type: none"> ▪ Zoba education branch (reports ▪ Division (CPDD/ECCE) reports ▪ Zoba education branch reports ▪ Division (CPDD/ECCE) report ▪ Records of training | Commitment of MOE's departments and regional offices |
| Primary Level Education | | | |
| 1. Enhance professional capacity of teachers, School Directors and supervisors 1.1 Strengthen the professional capacity of teachers, school directors and supervisors through in-service training 1.2 Develop the pedagogic practice of teachers, school directors and supervisors through short-term training, seminars and workshops | <ul style="list-style-type: none"> • Training of 100 new teachers and refreshing 200 practitioners on LAPG, for 5 days in 2 years. • Refresher training of 3000 elementary school teachers on Learner Center and Interactive pedagogy (LCIP) • Develop teachers competence on Mathematics, English and Mother tongue teaching for 6300 teachers • Training of 300 PRC coordinators • Familiarization to 1100 Grades 4 and 5 teachers on Life Skills Education materials • Familiarization of PE Resource Book of Grades 5 for 1200 teachers • Familiarization of 850 primary School Directors and Supervisors with policies, guidelines, ... of MOE • Training of 1200 teachers on writing system, grammar, tone and mother tongue teaching methodology • Training 500 school directors on community mobilization | <ul style="list-style-type: none"> • Reports of training of teachers on LAPG, LCIP, PRC and MT methodology to be submitted • Reports on familiarization of teachers with life skill education, PE resource books and, policies, guidelines • Reports of training of teachers on | <ul style="list-style-type: none"> • Effective collaboration of Zoba and Sub Zoba Education Offices |

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| | | writing system, grammar, tone and mother tongue teaching methodology | |
| <p>2. Strengthening school support system</p> <p>2.1 Equip elementary schools with library books and PRC materials</p> <p>2.2 Establishing new PRCS</p> | <ul style="list-style-type: none"> • Procurement of Library furniture • Procurement of library books • Construction of PRCs • Procurement of PRCs materials | <ul style="list-style-type: none"> • Reports of procurement and distribution of PRC materials, library books and furniture to the schools • Observation and report on the construction of PRCs • Reports of procurement and distribution of PRC materials • Reports of constructed new schools • Reports of schools equipped Sports and Physical education material | <ul style="list-style-type: none"> • Efficient procurement system in place |
| <p>3. Improving school environment</p> <p>3.1 Replacing temporary shelters with permanent classrooms</p> <p>3.2 Consolidating of wash provision</p> <p>3.3 Equip schools with sport facilities and physical education materials</p> <p>3.4 Strengthen school health services</p> | <ul style="list-style-type: none"> • Construction of 22 new WASH facilities • Training of 500 School Directors on Wash provision • Procurement of Sports and Physical education materials • Training of 960 school health focal person on school based delivery of health services • Training of 1300 school health focal persons on Safety and Injury prevention | <ul style="list-style-type: none"> • Observation and report of findings on the construction of PRCs • Reports on procurement and submission of sports and physical education materials • Reports on the production of | <ul style="list-style-type: none"> • Efficient procurement system in place |

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| | | supplementary readings <ul style="list-style-type: none"> • Reports on training of teachers on health delivery and school children protection • Report on the training of health focal persons | |
| 4. Strengthening the supply of curriculum materials 4.1 Develop curriculum materials 4.2 Equip schools with teaching and learning materials 4.3 Produce mother tongue teaching and learning materials | <ul style="list-style-type: none"> • Preparation and translation of PE Resource book Gr. 5 • Producing supplementary reading materials (2books for each language) • Preparation and printing of supplementary readers, in 9 languages 4 books in primary • Translating the elementary level reviewed manuals into 9 Eritrean languages • Procurement of teaching aid materials for 1000 elementary schools • Procurement of supplementary reading materials 500 Elementary Schools • Printing of 8000 Physical Education resource book Grade 5 • Printing 400,000 Supplementary readers, 9 languages 4 books in primary • Reading assessment survey conducted and reported; • Preparing grammar book • Preparing of monolingual dictionary in 7 languages • Production of ongoing MT teaching songs in 3 languages (Saho, Nara and Kunama) | <ul style="list-style-type: none"> • Preparation of PE resource book, supplementary reading materials • Submission of reviewed and translated manuals • Report on procurement and distribution of teaching materials, supplementary reading materials to schools • Submission of the printed PE resource books and supplementary readers • Submission of the prepared documents of grammar book, monolingual dictionaries and MT songs | <ul style="list-style-type: none"> • Motivation of curriculum developers and co-writers |

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| Middle Level Education | | | |
| 1. Strengthen the supply of curriculum materials 1.1 Supply textbooks, teachers guides and manuals | <ul style="list-style-type: none"> • Number of resource books printed • Number of TB printed • Number of TG printed • Number of manuals printed • Number of guidelines printed | Report from warehouse | |
| 2. Improve school environment 2.1 Expand and consolidate school WASH facilities 2.2 Equip schools with sport facilities and physical education materials 2.3 Enhance school health services 2.4 Strengthen guidance and counseling services in middle schools | Number of schools benefited | Engineer and REO reports | |
| 3. Strengthen school support systems 3.1 Strengthen schools with teaching aid materials, library books and science demonstration | Number of schools equipped | Supervisor and REO reports | |
| 4. Enhance the Professional capacity of teachers, directors, supervisors and other professionals 4.1 Familiarize teachers on curriculum materials 4.2 Enhance teacher's professional competence through short term training, seminars and workshops | <ul style="list-style-type: none"> • Number of familiarized teachers • Number of participants received training, seminars and workshops • Training manual/tool developed | <ul style="list-style-type: none"> • Reports of REO and facilitator • Reports of REO and trainer | |
| Secondary Level Education | | | |
| 1. Strengthen the supply of curriculum materials 1.1 Develop relevant textbooks and | <ul style="list-style-type: none"> • Number of consultation workshops • Number of participants of the consultation workshop • DTP process accomplished | <ul style="list-style-type: none"> • Progress report of panelists • Consultation | Ministry's commitment to develop quality of learning |

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| <p>teachers guides to the beneficiaries. 1.2 Print and reprint textbooks and teachers guides</p> | <ul style="list-style-type: none"> • Number of Textbooks and teachers guides revised and produced • Ratio of textbook to student • Ratio of teachers guide to teacher • Number of Textbooks and teachers guides reprinted • Ratio of textbook to student • Ratio of teachers guide to teacher | <p>workshop attendance</p> <ul style="list-style-type: none"> • Completion of DTP • Bidding with printing press • Availability of textbooks and teachers guides in the hands of learners and teachers • Procurement office report • Central and Zoba warehouse document | <p>and teaching process</p> |
| <p>2. Establish and strengthen the support system 2.1 Expand and consolidate the provision of furniture, equipment, chemicals models and charts for secondary school science laboratories 2.2 Expand and consolidate the provision of reference books and furniture for secondary school libraries 2.3 Strengthen the professional capacity of support system personnel and teachers</p> | <ul style="list-style-type: none"> • Number of school equipped with lab equipment • Percentage of the materials required to run practical activities • Number of schools equipped with teaching aid materials • Percentage of the materials required to conduct demonstration • Number of schools equipped with laboratory furniture • Number of schools equipped with library furniture • Number of schools equipped with Reference and Supplementary Readers • Number of training on usage of laboratory conducted • Number of training on library management conducted • Number of Assessment meetings on the usage of science laboratory conducted | <ul style="list-style-type: none"> • Procurement officer report • Distribution list by Zoba and school • Zoba and schools reports on the usage of the labs rooms • Observation of items on ground • Training reports • Training attendance sheet • Availability of trained teachers and lab technicians in schools • Training reports • Training attendance sheet Availability of trained librarians in schools | <p>Ministry's commitment to develop quality of learning and teaching process</p> |

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| | | <ul style="list-style-type: none"> • Meeting reports • Meeting attendance sheet | |
| <p>3. Improve School Environment</p> <p>3.1 Expand and consolidate school WASH facilities</p> <p>3.2 Equip schools with sport facilities and physical education materials</p> <p>3.3 Strengthen school health services</p> <p>3.4 Enhance guidance and counseling services</p> | <ul style="list-style-type: none"> • Number of WASH facilities constructed • Number of schools equipped with sports and PE materials • Number of training on menstrual hygiene management conducted • Number of training conducted on screening, referral and provision of first aid • Number of training conducted on injury prevention • Number of training conducted on counseling and guidance | <ul style="list-style-type: none"> • Availability of WASH facilities • Reports • Procurement officer report • Distribution list by Zoba and school • Zoba and schools reports on schools' sport activities • Observation of items on ground • Training reports • Training attendance sheet | Ministry's commitment to develop quality of learning and teaching process |

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| <p>4. Enhance professional capacity of teachers, directors, supervisors and other professionals</p> <p>4.1 Strengthen the pedagogic practice of teachers, directors and Provide through in-service training</p> <p>4.2 Enhance teacher’s professional competencies through short term training, seminars and workshops</p> | <ul style="list-style-type: none"> • Number of Teachers , school directors and supervisors familiarized with policies and , guidelines of the MOE • Number of Teachers familiarized with secondary education textbooks • Number of Teachers familiarized with Citizenship Education TBs and TGs • Number of Teachers familiarized with ICT TBs and TGs • Number of Teachers familiarized with Life Skills Education TBs and TGs • Number of training conducted on LAPG • Number of training conducted on LCIP | <ul style="list-style-type: none"> • Familiarization program report • Attendance of participants • Familiarization program report | <p>Ministry’s commitment to develop quality of learning and teaching process</p> |

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| TVET Education | | | |
| <p>2. Achieve mastery of technical and vocational skills and competencies</p> <p>2.1 Attach instructors and students to industries.</p> <p>2.2 Conduct CPD programs for instructors and management staff</p> <p>2.3 Revise existing curriculum, development of textbook and introduction of three new fields of studies</p> <p>2.4 Conduct and develop curriculum reviews to respond market needs.</p> | <ul style="list-style-type: none"> • 286 instructors and 40 management staff upgraded • Attach 640 instructors and students to industry • 600 TVET instructors and 160 school administration and TVET management staff got induction, refreshment courses through workshops and seminars • Three research areas related to TVET system conducted • 160,000 Textbooks and instructor guide printed and distributed • Monitoring and quality assurance system strengthened. • TVET Qualification framework developed • Awareness of the partners and beneficiaries raised and created. • Three new field of studies introduced | <ul style="list-style-type: none"> • Supervision report • Survey report • Certification of students • Survey on employers' satisfaction on competency of graduates. • Procurement officer report • School/training centers report • Reviewed and adapted curriculum. • Printed textbooks and instructor guides. • Feedback from workshops and seminars conducted. | <ul style="list-style-type: none"> • Sustained Government commitment. • Strong co-operation of partners. • Organized and continuous sensitization. • Collaboration of Higher Education Institutions |

| Adult and Non-formal Education Literacy | | | |
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| <p>5. Improve learning outcomes in literacy CEE and continuing education provisions</p> <p>1.1 Conduct needs survey and impact analysis to develop relevant and learner centered curriculum for literacy & continuing education</p> <p>1.2 Organize writers workshops to prepare learning materials in local languages and English</p> | <ul style="list-style-type: none"> Curriculum adapted to enhance learning outcome of students (continuing education). Capacity of teachers to implement the new curriculum developed Teachers and learners supported with teaching learning materials Facilitators got required records for teaching Post literacy text prepared in Bdawyet in 4 subjects (Maths, Language(MT), Science and social studies) Number of textbooks reprinted and distributed based on the demand from the respective zobas for adult literacy and CEE in local languages) Adequate scholastic materials prepared and provided to teachers and learners Learners received learning materials free of charge National examination(8th grade) and matriculation results improved for continuing education learners | <ul style="list-style-type: none"> Reviewed curriculum Adapted curriculum Assessment report Training report Printed forms and certificates | <p>Government commitment to transform the education sector</p> |
| <p>2.Train and upgrade literacy and CEE facilitators, programs coordinators, supervisors, directors and community attendants/librarians</p> <p>2.1. Building capacities of literacy facilitators and adult educators and program developers and coordinators through effective training methods and adequate remuneration schemes</p> | <ul style="list-style-type: none"> About 3000 annually recruited adult literacy and CEE facilitators, got at least for about two weeks orientation training Assist experienced literacy facilitators to complete their secondary education in summer course supported by distance and self-learning to improve their teaching competences One week refresher training orientation provided to adult and non-formal program supervisors and coordinators annually on how to plan and implement literacy and continuing education programs Selected adult and CEE facilitators trained. in collaboration with HRD About 200 Community reading rooms attendants(librarians)got orientation training(about 150 annually) | <ul style="list-style-type: none"> Records of the trainees' Training report Secondary school completion certificates and trainees records Workshop & Seminar papers | <ul style="list-style-type: none"> Commitment of MOE's high officials Commitment of regional officers Collaboration of Zobas and Schools |
| <p>3. Create literate environment by opening community reading rooms as part of the provision of literacy and continuing education programs</p> <p>3.1. Create literate environment by increasing the number of community</p> | <ul style="list-style-type: none"> 120 new reading rooms opened until 2022 (20 in each zoba) focusing on villages with successful literacy achievements (estimated as literate villages). Situation analysis survey conducted and relevant data collected on the existing community reading rooms for improvement and appropriate actions Varied supplementary reading materials in mother tongue and English produced/procured and distributed for use. | <ul style="list-style-type: none"> Procurement officer report Annual reports Survey reports | <p>Government commitment to consolidate literacy and continuing education programs</p> |

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| <p>reading rooms, and further developing them into community learning centres (CLCs), by furnishing relevant learning material, furniture and enhancing the profile of community attendants (librarians)</p> | <ul style="list-style-type: none"> • About 50 community reading rooms well equipped with required furniture and facilities (2 reading rooms annually in each zoba) since 2019 • Orientation short training provided to 200 reading room attendants (100) • Services of community reading rooms enhanced & expanded and number of readers/ customers increased annually majority of which adult education learners. • 2 Mobile libraries introduced and assessed • Reading rooms equipped as local resources centers | | |
| <p>4. Produce educational audio & video materials to promote learning and sensitize communities</p> <p>4.1. Enhance adult & non-formal learning and sensitization via multi-media</p> | <ul style="list-style-type: none"> • Different educative and educational materials prepared and used as inputs for improving qualities of adult education programs in place. • Radio and TV short dramas produced and broadcasted by the national media promoting parents and communities role in the education of themselves and their children. • The educational media of MoE strengthened and give full fledged support to the adult and non formal education programs. | <ul style="list-style-type: none"> • Activity report • Produced, distributed and broadcasted audio and video materials. | <p>Ministry's initiative to introduce audio visual learning</p> <p>Literacy and CEE centers equipped with AV equipments</p> |
| <p>5. Enhance research-based planning and decision making</p> <p>5.1 Conduct impact and needs assessment of the implementation of literacy, CEE and continue education programs</p> | <ul style="list-style-type: none"> • Survey on the impact of adult literacy conducted. • Assessment survey on the effectiveness of CEE program helped to improve its implementation conducted. • Learning needs survey on continuing education program conducted as a base to expand and fulfill beneficiaries demand. | <p>Survey and annual reports.</p> <p>Revised documents and guidelines</p> | <p>Dep. Of RHRD ready to facilitate.</p> <p>Zoba education offices actively involved.</p> |
| <p>6. To improve adult and non-formal data collection and management to promote evidence based decisions</p> | <ul style="list-style-type: none"> • Adult and non-formal education EMIS fully functioning. • Data accuracy improved | <p>EMIS Reports</p> | <p>Dep. Of RHRD fully collaborated.</p> <p>Zoba education offices</p> |

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| <p>6.1 Establish adult education information network and data base (as part of EMIS) that capture all data of the different adult education providers in the country and build the capacity of the staff</p> | <ul style="list-style-type: none"> • All adult and non formal education data reported properly on the annual statistics book of MoE. • A comprehensive national report on adult and non formal education provision in the country prepared and disseminated to partners and stakeholders for further intervention and collaboration since 2019 | | <p>assigned qualified personnel.</p> |
| Teacher Education | | | |
| <p>1. Upgrade the academic and professional capacity of teachers and Educational</p> <p>1.1 Provide certificate level in-service training</p> <p>1.2 Upgrade certificate level teachers to diploma level</p> <p>1.3 Upgrade Diploma holders to degree level</p> <p>1.4 Upgrade Degree holders to master's level</p> | <ul style="list-style-type: none"> • 500 uncertified basic education teachers trained at certificate level • 500 uncertified basic education teachers trained at certificate level • 500 nomadic education teachers trained through summer programs. • 500 mother Tongue education teachers trained at certificate level • 500 Pre-primary education teachers trained at certificate level • 500 CEE education teachers trained at certificate level • 500 unqualified basic education teachers trained and upgraded to certificate level • 2000 basic education teachers trained to diploma level through ODLP (Batch I) • 2000 basic education teachers trained to diploma level through ODLP (Batch II) • . 600 basic education female teachers upgraded to diploma level • 600 basic education directors upgraded to diploma level • 600 Upgrade basic education teachers to diploma level • 200 Upgrade basic education female directors to diploma level • 200 TVET instructors upgraded to diploma level • 200 Physical Education Teachers upgraded to diploma • 200 uncertified librarians trained at diploma level • 100 uncertified laboratory technicians trained at diploma level • 400 Diploma holder teachers upgraded to degree level • 100 TVET instructors upgraded to degree level • 50 Physical Education teachers upgraded to degree level • 100 Diploma holder directors and Supervisors upgraded to degree level • 50 diploma level librarians upgraded to degree level • 150 teachers, and education managers | <ul style="list-style-type: none"> • Records of the trainees' • College diplomas • Certificates • Training report • ACCE Certificates and records • College records • Secondary school completion certificates and trainees records • Finalized policies document • Induction reports • Workshop & Seminar papers • Evaluation reports | <ul style="list-style-type: none"> • Strong collaboration of higher education institutes and colleges • Availability of evening schools • Commitment of MOE's high officials • -Commitment of regional officers • Collaboration of Zobas and Schools |

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| | <ul style="list-style-type: none"> • .Selection procedures conducted for 4000 grade ten completers • 2000 new student teachers trained • Awareness of 2000 basic education teacher trainees' on Gender-Fair Teaching, Life Skills and HIV/AIDS improved. • Newly appointed 12500 basic & secondary School Teachers inducted/introduced to the school system and activities | | |
| <p>2. Upgrade the academic qualification of the existing unqualified teachers</p> <p>2.1: Provide summer training and self-study program to complete secondary education</p> <p>2.2: Provide Open and Distance Learning Program (ODLP) to certificate and diploma level</p> | <ul style="list-style-type: none"> • 2000 Teachers who have not completed secondary school level, educated and completed. • Conduct ToT to 120 SNE teachers at a national • Conduct training to 3000 SNE teachers at zoba level • Conduct ToT to 60 Education managers at a national • Conduct Training for 900 Education managers at zoba a level • Conduct ToT to 150 English teachers language proficiency at a national • Conduct Training for 1500 English teachers in language proficiency at a zoba level • Conduct ToT to 150 English language methodology at a national level • Conduct Training for 1500 English teachers on English methodology at a zoba level • Conduct ToT to 150 Mathematics teaching methodology at a national level • Conduct training for 1500 Mathematics teachers on mathematics teaching methodology at a zoba level • Conduct ToT training on Fine Arts education for 150 teachers at a national level • Conduct training for 1500 teachers on Fine Arts Education at a zoba level • Conduct ToT training on Multi Grade Teaching for 150 teachers at a national level • Conduct training for 1500 teachers on Multi - Grade teaching at a zoba level • Conduct ToT training on Mother Tongue Education for 150 teachers at a national level • Conduct Mother Tongue training for 1500 teachers at a zoba level • Conduct training for 40 PRC coordinators | <ul style="list-style-type: none"> • College reports • Training report • Certificates, Diplomas and Bachelors & Masters Degrees | <ul style="list-style-type: none"> • MoE's • Collaboration with higher education institutes and colleges |

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| | <ul style="list-style-type: none"> Conduct training on Arabic language proficiency for 150 Arabic language teachers at a national level | | |
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SYSTEM CAPACITY AND DEVELOPMENT

| Intervention Logic | Objectively verifiable indicators | Means of verification | Assumptions |
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| I. SYSTEM CAPACITY AND DEVELOPMENT | | | |
| Pre-Primary Level Education | | | |
| 1. Improving Efficiency of programme implementation 1.1 Develop ECCE costed strategy plan 2.2 Identify the current situation of ECCE 1.3 Monitoring the implementation of ECCE Curriculum | <ul style="list-style-type: none"> Finalized study report ECCE Strategy plan document Finalized study report on situation of ECCE in 2002 Division report Finalized study report on situation of ECCE in 2002 Division report | <ul style="list-style-type: none"> Study report Division (CPDD/ECCE) reports Study report Division (CPDD/ECCE) reports Zoba education branch reports Division (CPDD/ECCE) reports Records of monitoring report | Commitment of MOE's departments and regional offices |
| Primary Level Education | | | |
| 1. Improving Efficiency of programme implementation 1.1 Supervise and evaluate program implementation 1.2 Monitor and evaluate curriculum materials 1.3 Learning achievement surveyed and assessed | <ul style="list-style-type: none"> School visits twice a year Annual evaluation meeting with 200 supervisors twice a year Annual evaluation meeting with nomadic schools Directors once a year Evaluation on the English phonetics at elementary schools Monitor implementation of elementary school curriculum materials Conducting survey on the availability of functionality WASH facilities of existing elementary schools Conduct reading survey, in 60 sample elementary schools, | <ul style="list-style-type: none"> Reports on the findings of school visits, annual evaluation meetings and curriculum monitoring visits to schools Submission of different report | <ul style="list-style-type: none"> Effective collaboration of Zoba and Sub Zoba Education Offices |

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| | <p>activities, finalize, finding ... for 1800 p/day</p> <ul style="list-style-type: none"> • Conducting MLA survey and producing 1000 copies of the report • Conduct dialect survey in Budawyet language • Conducting research on upgrading Mother tongue on vocabulary in 9 languages • Conducting MT vocabulary study in 9 languages reported | documents of conducted surveys (WASH, MLA IV, reading, dialect and MT vocabulary) | |
| Middle Level Education | | | |
| <p>1. Enhance the efficiency of program implementation</p> <p>1.1 Raise the awareness and knowledge of teachers, school directors and supervisors on the procedures, processes and outcomes of national examinations</p> <p>1.2 Monitor the education delivery at schools (supervision visits)</p> <p>1.3 Strengthen the monitoring and evaluation capacity of supervisors to assess schools performance (2 times a year)with supervisors 2 times a year</p> <p>1.4 Learning achievement surveyed and assessed</p> <p>1.5 Monitor and evaluate curriculum and assessment implementations</p> | <ul style="list-style-type: none"> • number of focal persons participated • Monitoring and evaluation of curriculum and assessment implementations • number of schools visited • number of assessment meetings conducted with supervisors • Number of survey studies conducted • number of monitored schools • number of schools evaluated • number of monitored schools • Conduct of national exam | Report of DGE and REO | |
| Secondary Level Education | | | |
| <p>1. Improving efficiency of program implementation</p> <p>1.1 Strengthen the monitoring and evaluation capacity of supervisors to</p> | <ul style="list-style-type: none"> • Relevant instrument for monitoring and evaluation developed and implemented • Timely and relevant information on curriculum implementation collected and pertinent solutions forwarded • School visits to monitor implementation of the curriculum is | <ul style="list-style-type: none"> • Evaluation Report • The progress of geography teachers on the ground • Monitoring report | Ministry's commitment to develop quality of learning and teaching process |

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| <p>assess schools performance (2 times a year)</p> <p>1.2 Learning achievement surveyed and assessed</p> | <p>carried out</p> <ul style="list-style-type: none"> Annual evaluation meeting is conducted | <ul style="list-style-type: none"> Interventions made Evaluation meeting Minutes | |
| Adult and Non-Formal Education | | | |
| <p>1. To provide professional and material support to other adult education providers</p> <p>1.1 Create linkages and collaborative support with all government and non-government adult education program providers</p> <p>1.2 Conduct joint monitoring and supervision practices as well as produce evaluation reports for appropriate action and interventions</p> | <ul style="list-style-type: none"> Implementing Guidelines and directives provided Planned joint monitoring and supervision visits conducted Texts and guide provided as needed Evaluation and consultation meetings organized Assessment surveys conducted Orientation training provided to teachers, supervisors etc | <ul style="list-style-type: none"> Supervision and activity report. | <ul style="list-style-type: none"> Ministry's willingness to expand and cooperate with other adult education providers |
| <p>2. Strengthen monitoring and evaluation</p> <p>2.1 Enhancing monitoring and supervision to ensure provision of quality adult and non-formal education</p> | <ul style="list-style-type: none"> Monitoring and supervision tools, guidelines, directives etc reviewed Policy documents, guidelines reviewed, published and used. Regular and planned monitoring and supervision visits conducted in collaboration with the zobas Joint monitoring visits with partners and zoba education branches conducted Evaluation and consultative meetings organized with stakeholders based on annual reports and surveys (supervision reports) | <ul style="list-style-type: none"> Supervision reports. Reviewed documents | <ul style="list-style-type: none"> Government commitment to provide adequate resources to conduct M/E. MoE willing to revise it policy documents. |
| <p>3. To enhance Staff professional development</p> | <ul style="list-style-type: none"> The capacity of adult education updated by organizing in house workshops and orientation trainings on issues related ANFE provisions such as curriculum development, | <p>Training report</p> | <p>MoE commitment on staff development</p> |

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| <p>3.1 Review and update policy , directives and guide lines</p> <p>3.2 Organize in house workshops and short trainings on adult and non-formal education</p> | <p>supervision, planning, conducting surveys, managing data etc. (on the job training)</p> <ul style="list-style-type: none"> • 20 Educational multimedia producers up graded their skills. • All Adult education program coordinators and supervisors updated and oriented annually (working at zoba and sub-zoba levels). • Adult literacy and CEE facilitators/teachers got at least about two weeks training on teaching and learning as well as an appropriate use of curriculum • Study tour to relevant countries to share experience and lessons • Review update, publish and distribute the National Policy on adult Education | | |
| Teacher Education | | | |
| <p>1. Enhance the human resource development capacity of MoE</p> <p>1.1 Strengthen the planning and implementation capacity of MoE</p> | <ul style="list-style-type: none"> • Strengthen the planning and implementation capacity of MoE • Conduct short-term training on planning and implementation • Establish a fully functional Teacher Management Information System (TMIS) • Develop Comprehensive National Teacher Policy • Awareness of the values and roles of teachers and education leaders in the community raised • Needs assessment and development of HRD through ICT • Study tour to acquire best practices of TMIS • RHRD officials conducted educational study tour in selected countries with best teacher education development, on Open & Distance Learning practices • Develop instrument for monitoring and evaluation and conduct Monitoring and Evaluation • Training needs assessment on teachers and education managers conducted. | <ul style="list-style-type: none"> • Workshop reports • Teaching practice reports • Report of the orientation | <p>Commitment of MOE's officials and regional officers</p> |

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| <p>2. Enhance the capacity of teacher training institution</p> <p>2.1 Strengthen the teacher training program</p> | <ul style="list-style-type: none"> • Establish and Equip two teacher training centers • Develop code of conduct for student teachers and teacher educators • Renovation of ACCE • ACCE's Internet access enhanced/strengthened • Awareness of the values and roles of teachers and education leaders in the community raised • Teacher training certificate programs reviewed and evaluated. | <ul style="list-style-type: none"> • Certificates • ACCE's records • Workshop reports • Teaching practice reports • Report of the orientation | <p>Commitment of MOE's officials and regional officers</p> |
| System Capacity and management II | | | |
| <p>1. Develop Organizational Framework of MOE institutions</p> <p>1.1 Develop and review all sub-sector policy and strategy</p> <p>1.2 Review, develop and update management Procedures, Rules and Regulations in relation to the respective systems for the three levels of MOE.</p> <p>1.3 Establish a unit within the DTVET which oversees the activities of the non-formal training providers</p> <p>1.4 Develop framework for establishing a National Coordinating Body for</p> | <ul style="list-style-type: none"> • Sub sector policies, guidelines and strategies reviewed • The organization framework of MOE reviewed and articulated in the context of decentralization. • 20 existing management Procedures, Rules and Regulations (PRR) reviewed and disseminated in relation to the respective systems for the three levels of MOE. • Develop 5 new PRR and disseminate • A Unit established in the DTVET to oversee the functions of non-formal training providers • Framework for establishing a National Coordinating Body for TVET system developed and disseminated | <ul style="list-style-type: none"> • Final report of the reviewed and new PRR | <p>Government's commitment to develop the education sector</p> |

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| <p>TVET system.</p> <p>1.5 Develop the capacity of adult education program coordinators and supervisors</p> <p>1.6 Review and update policy, directives and guide lines of adult education</p> <p>1.7 Strengthen the capacity of adult and non-formal education personnel in planning and implementation (in house workshops and short trainings)</p> | | | |
| <p>2. Develop Management Systems of MOE institutions</p> <p>2.1 Develop a comprehensive and integrated Educational Management Information System (EMIS)</p> <p>2.2 Strengthen TVET linkage with line ministries and stakeholders</p> <p>2.3 Strengthen and enhance the assessment system and capacity of staff</p> | <ul style="list-style-type: none"> • a comprehensive and integrated Educational Management Information System (EMIS) for all sub sectors developed and functional • Internal communications systems, including the systems for managing the flow of information strengthened • Incentive Schemes and career Ladders guideline for all categories of staff developed and disseminated; • Staff performance appraisal system developed and ready for use; • Monitoring and Evaluation System developed and in use • TVET linkage with line ministries and stakeholders strengthened • The capacity of assessment staff Strengthen and the assessment system enhance • The capacity of 100 EMIS personnel at national, zoba and sub-zoba levels on the usage of the new software developed. • Knowledge of 150 EMIS users enhanced • Improved human management and personal data systems. • Teacher Information Management System (TIMS) developed and | | |

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| | functional | | |
| <p>3. Develop Institutional and Professional Development of teachers</p> <p>3.1 Increase the output of new teachers</p> <p>3.2 Develop the knowledge and skills required to manage the sector and subsectors at all levels through generic and professional development programs.</p> <p>3.3 Develop the professional skill of MoE staff in planning, accounting, financial management, procurement and monitoring and evaluation</p> <p>3.4 Strengthen Educational Research and Development practices in education for all sub sectors and at all levels of the sector</p> | <ul style="list-style-type: none"> • Two Teacher Training Institutions established and 1000 student teachers produced per year. • Strengthen Teacher Training, Professional Development and Support System; • 120 management staff at MOE, zoba and sub zoba levels upgraded to diploma level; 100 s staff to first degree and 50 staff to Masters Levels. Upgraded and developed the knowledge and skills required to manage the sector and subsectors at all levels through generic and professional development programs. • Strengthen Educational Research and Development practices in education for all sub sectors and at all levels of the sector | <ul style="list-style-type: none"> • EMIS report • HRD division report | MOE's enhanced experience in various training programs |
| <p>4. Enhance the information base for planning and decision making through research, Surveys and strengthened documentation center of the Ministry.</p> <p>4.1: Improve evidence-based planning and decision making practices through surveys and studies</p> | <ul style="list-style-type: none"> • Evidence-based planning and decision making practices improve • National Literacy Survey conducted and disseminated • Household expenditure survey conducted and disseminated • Labour market information system (LMIS) established and working, as evidenced by number and value of reports produced • Study on the Role of the Private Sector on Education conducted and disseminated • Study on Financing of Education conducted and disseminated • 10 targeted studies identified, conducted and disseminated • National Report on the Development of Education in Eritrea | <ul style="list-style-type: none"> • Survey reports • Procurement report • Training report | |

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| | <p>prepared and disseminated</p> <ul style="list-style-type: none"> • The documentation unit equipped with 10 computers and accessories, various types of furniture, 1000 books and journals procured • 30 staff from MOE and zoba trained on documentation • 6 zoba documentation centers established and equipped with computers and accessories | | |
| <p>5. Enhance the research culture at zoba and sub-zoba level</p> <p>5.1: Develop the capacity of staff at all levels on educational research methodology and household survey skills</p> | <ul style="list-style-type: none"> • 800 MOE staff at central, zoba and sub zoba levels education officers and supervisors trained on basic educational research methodology to enhance effective delivery of education services. • 400 MOE staff at central and zoba level trained on advanced educational research methodology to enhance effective delivery of education services. • 500 secondary school teachers, 150 secondary school directors, 200 middle level directors, 100 middle level teachers and 100 zoba, sub zoba education officers and supervisors trained on school-based action research and research activities at school and sub zoba levels monitored and the best research papers disseminated and rewarded • The capacity of 600 staff on educational research methodology developed • The capacity of 300 staff on household survey skills developed • 900 secondary school teachers trained on school-based action research • 18 school-based action research papers produced by teachers and disseminated • 180 teachers got technical support on action research • Workshops conducted and the results of teachers research disseminated • 18 teacher researchers received incentives annually | <ul style="list-style-type: none"> • Training report • Reports of school-based research • Monitoring report • Workshops report • Report of the incentive awarded | <ul style="list-style-type: none"> • The experience gained in conducting collaborative research ensures the effective implementation of the surveys and studies. • Research skill gained will ensure the effective implementation • Ministry's desire to improve quality education through school-based action research |

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| <p>6. Strengthen data collection process, analysis, reporting systems, including the systems for managing the flow of information.</p> <p>6.1 Develop the capacity of data collection, analysis and reporting system</p> | <ul style="list-style-type: none"> • 2000 school directors, supervisors, sub-zoba and zoba education officers trained on Educational Management Information System and analysis and the quality and flow of information improved. • The capacity of 70 MOE and zoba staff on data base management developed. • The capacity of 70 MOE and zoba staff on data analysis and reporting enhanced. • The capacity of 65 MOE and zoba staff on Geographical Information System (GIS) and school resources location developed • A five year Education Brief prepare and 3000 copies printed and disseminated • 6 zobas and 58 sub-zobas networked/connected with MOE and timely and reliable data collection improved. • 40 servers and network materials, 100 printers, 100 photocopiers and 40 modems procured and installed • 40 solar panels procured and installed in 40 sub-zoba offices • 2000 schools provided with computers and accessories for EMIS function • Technical support provided for zoba and sub-zoba EMIS personnel and their capacity on networking and usages improved. | <ul style="list-style-type: none"> • EMIS report | <p>The experience developed in the past years in the training of EMIS related activities</p> |
| <p>7. Upgrade the professional capacity of MOE staff at all levels</p> <p>7.1 Professional capacity of MOE staff upgraded to various academic levels level</p> | <ul style="list-style-type: none"> • MOE staff upgraded to Diploma (130), to Degree (80) and to Masters (60) level | <ul style="list-style-type: none"> • College reports • Training report • Certificates, Diplomas and Bachelors & Masters Degrees | <p>The improved collaboration of higher education institutes and colleges</p> |

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| <p>8. Objective 8: Enhance the capacity of MOE offices through the provision of logistics and equipment 8.1 Strengthen educational offices at all levels through the provision of equipment and supplies, communication means, and office spaces</p> | <ul style="list-style-type: none"> • The management capacity of MOE enhanced through the provision of 300 computers, 200 laptops and accessories, 200 photocopiers, 200 printers, ... etc. • The management capacity of MOE enhanced through the provision 150 office tables, 100 cupboards, 100 shelves, 150 chairs and other relevant furniture • Special schools constructed and furnished with necessary supportive special teaching | <ul style="list-style-type: none"> • Procurement officer report • Disbursement report | <p>Acknowledgment of the need to equip the Ministry with various legal procedures and equipment.</p> |
| <p>9. Best practices on various educational programs shared through study tours 9.1 Best practices and experiences on various educational programs of other countries shared</p> | <ul style="list-style-type: none"> • MOE officials conducted educational study tour in selected countries with best practices on EMIS, teacher education development and TIMS, on Open & Distance Learning practices, on curriculum development, on special needs education, on early childhood education, on multi-grade teaching, on PTSA, on national examination and assessment systems, on mass literacy and on TVET and experiences shared /gained and institutional linkages developed | <ul style="list-style-type: none"> • Study tour report; • Institutional linkage agreement | <p>Selection of appropriate countries</p> |
| <p>10. Enhance working conditions through the building of new office spaces and store facilities in MOE and zoba locations. 10.1: Enhanced storage capacity of MOE 10.2: Improved and consolidated MOE Office</p> | <ul style="list-style-type: none"> • Sufficient store built • Working environment improved • Improved and consolidated MOE Office | <ul style="list-style-type: none"> • Engineers' report • Spot checks to construction sites • Architects' reports | <p>Governments' commitment to improve working conditions.</p> |
| <p>11. Enhance the production capacity of educational materials 11.1 The capacity of educational materials production workshops enhanced</p> | <ul style="list-style-type: none"> • The capacity educational materials production workshops enhanced • Installed new metal and wood work machines and the production capacity strengthened | <ul style="list-style-type: none"> • Engineers report | <p>Ministry's commitment to improve working condition and the printing and the school materials production capacity.</p> |

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| <p>12. Strengthen the production capacity of printing press</p> <p>12.1 Installed new printing offset and the printing capacity strengthened</p> | <ul style="list-style-type: none"> • Installed new printing offset and metal and wood work machines • Acquired sufficient raw materials. | <ul style="list-style-type: none"> • Procurement officer reports • Engineers report | <p>Ministry's willingness to enhance the printing press</p> |
| <p>13. Strengthen the distribution efficiency of logistics and monitoring of education delivery through the procurement of trucks, vehicles and motor bicycles and related supplies</p> <p>13.1 Improved disbursement and transportation capacity of logistical materials and monitoring of the delivery of education</p> | <ul style="list-style-type: none"> • Improved disbursement and transportation capacity of logistical materials • Monitoring of schools strengthened | <ul style="list-style-type: none"> • Procurement and logistics officer report. • Vehicle delivery notes | <p>High demand of the Ministry for effective delivery of education services.</p> |
| <p>14. Sector challenges identified and remedial actions taken, lessons learned documented for further action.</p> <p>14.1 The Implementation of ESP monitored and evaluated</p> | <ul style="list-style-type: none"> • The Implementation of ESP monitoring strengthened and the results reported and disseminated for further action | <ul style="list-style-type: none"> • Monitoring report • Supervision report • M&E report • Evaluation and workshops report • Assessment report | <p>Monitoring and evaluation system in place</p> |

Annex 4: CROSS CUTTING ISSUES

| Intervention Logic | Objectively verifiable indicators | Means of verification | Assumptions |
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| CROSS CUTTING ISSUES | | | |
| Special Needs Education (SNE) | | | |
| <p>1. Enhance education access for children with disabilities at all levels</p> <p>1.1 Strengthen special schools to outreach communities</p> <p>1.2 Consolidate the existing special classes</p> <p>1.3 Provide resources to special school to accommodate children with special needs</p> <p>1.4 Strengthen SNE operational guides for enrolling and accommodating children with disabilities</p> | <ul style="list-style-type: none"> ▪ Number of community, regional education and CBR services staff trained and networked with existing 3 special schools and special classes ▪ Enrollment of children with disabilities increase in special schools and special classrooms for both boys and girls ▪ Middle and secondary school level continuity improved ▪ Number of new special classes in regular schools constructed and providing SNE service ▪ Number of regular schools supported to ensure access for children with disabilities ▪ Number of central and regional education management trained on management of SNs services | <ul style="list-style-type: none"> ▪ Zoba education branch (and EMIS) enrollment annual statistics ▪ Division (CPDD/SNE) reports ▪ Records of training ▪ Records of training ▪ Guideline text on Management of SNs in zobas | <ul style="list-style-type: none"> ▪ Commitment of MOE's departments and regional offices, and regional social work (MLHW) offices |

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| <p>2. Improve the quality of learning and learning outcomes for children with special needs</p> <p>2.1 Modify and/or adapt curricula for educating children with various disabilities</p> <p>2.2 Strengthen special school and special class capacity to accommodate learning needs and increase local production of educational materials</p> | <ul style="list-style-type: none"> ▪ TA recruited to support with curriculum modification for SNs ▪ Number of core curriculum developers trained to adapt/modify curriculum materials to children with SNs levels; ▪ Modified and/or adapted curricula materials for K-5 for children with disabilities; ▪ Number of printed modified curriculum guide/manuals for SNs ▪ Number of pre-primary, primary, middle and secondary school teachers, directors and supervisors familiarized with adapted curriculum materials ▪ Number of special schools and special classes equipped with assistive learning materials to support SNs | <ul style="list-style-type: none"> ▪ Division (CPDD/SNE) report ▪ Activity report by TA ▪ Records of training ▪ Adapted K-5 grades text and TG ▪ Reports of division and zobas ▪ Manual ▪ Division (CPDD/SNE) and DAF report | <ul style="list-style-type: none"> ▪ Commitment of MOE's departments and regional offices |
| <p>3. Enhance the capacity of teachers to accommodate children with special needs/disabilities</p> <p>3.1 Increase the capacity (awareness) of teachers to accommodate learning needs of</p> | <ul style="list-style-type: none"> ▪ Number of teachers trained on identification and accommodation strategies in SNE | <ul style="list-style-type: none"> ▪ Records of training ▪ Division (CPDD/SNE) report | <ul style="list-style-type: none"> ▪ Commitment of MOE's departments and regional offices, |

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| children with special needs/disabilities | | | |
| 4. Increase school-community partnership in support of SNE services 4.1 Awareness raising to promote children with disabilities access and home support for school SNE services | <ul style="list-style-type: none"> ▪ Number and type of Audi-Video SNs promotion materials produced ▪ Duration of Audio-Video SNs Promotion materials propagated in national Radio/TV for 1-2 minutes in 56 weeks ▪ Number of teachers from urban and rural located schools sensitized in SNs | <ul style="list-style-type: none"> ▪ Audio-Video records produced in 3 languages ▪ Propagation performance reports ▪ Records of training ▪ Division (CPDD/SNE) report | Commitment of MOE's departments and regional offices, |
| 5. Improve institutional efficiency to monitor SNE program implementation 5.1 Assess access and quality opportunities of SNE services 5.2 Monitor the SNE program | <ul style="list-style-type: none"> ▪ Study report on SNE opportunities and services in Eritrea ▪ Study report on literacy and numeracy for children with blindness and deafness in middle and secondary schools in Eritrea ▪ Supervisory monitoring report compiled from 6 zobas annually | <ul style="list-style-type: none"> ▪ Report of study ▪ Records of training ▪ Division (CPDD/SNE) report ▪ Division (CPDD/SNE) and regional education compiled reports | Commitment of MOE's departments and regional offices, |
| ICT | | | |
| 1. Expand and consolidate ICT facilities and services in schools 1.1 Setup ICT labs in schools equipped with computers, furniture, LAN, and other essential teaching/learning materials 1.2 Revitalize existing ICT labs with essential ICT resources 1.3 Setup e-learning facilities in schools 1.4 Equip school management and operations offices, departments and libraries with essential ICT facilities | <ul style="list-style-type: none"> ▪ ICT facilities and services established in schools; ▪ Standard ICT labs equipped with computers, accessories, furniture, LAN, and other essential teaching/learning materials established; ▪ ICT labs replenished and revitalized with essential ICT resources; ▪ E-Learning facilities established; ▪ School management and operations offices, departments and libraries equipped with essential ICT facilities and resources. | <ul style="list-style-type: none"> ▪ Reports by ICT division ▪ Reports by Zoba Education Offices | <ul style="list-style-type: none"> ▪ Commitment of Government and MoE ▪ Commitment and readiness by Zoba Education Offices and Schools |
| 2. Ensure equitable access to ICT | <ul style="list-style-type: none"> ▪ Solar power systems installed in schools and education offices; | <ul style="list-style-type: none"> ▪ Reports by ICT | <ul style="list-style-type: none"> ▪ Commitment of |

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| <p>services with Solar Power Systems in remote rural schools and education offices</p> <p>2.1 Install solar power systems of 10 KW in rural schools with student population of 1000 and above</p> <p>2.2 Install solar power systems of 5 KW in rural schools with student population below 1000</p> <p>2.3 Install solar power systems of 5 KW in sub-zoba education offices that have no power supply</p> | <ul style="list-style-type: none"> ▪ Solar power systems of 10 KW installed in schools; ▪ Solar power systems of 5 KW installed in schools; ▪ Solar power systems of 5 KW installed in sub-zoba education offices; | <p>division</p> <ul style="list-style-type: none"> ▪ Reports by Zoba Education Offices | <p>Government and MoE</p> |
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| <p>3. Revitalize and upgrade central MoE and Zoba education offices ICT facilities and services</p> <p>3.1 Revitalize and upgrade the network infrastructure of the MoE</p> <p>3.2 Establish network infrastructure and facilities in six zoba education offices</p> <p>3.3 Establish internet connectivity, e-mail and website services for central and zoba education offices for integrated, efficient and timely educational planning and management</p> <p>3.4 Establish a national EdTech Lab and e-learning center equipped with essential facilities and education portal</p> <p>3.5 Revitalize the ICT training centers at central and regional education offices</p> | <ul style="list-style-type: none"> ▪ Central MoE and Zoba education offices ICT facilities and services revitalized and upgraded; ▪ Network infrastructure of the MoE revitalized and upgraded; ▪ Network infrastructure and facilities established in zoba education offices; ▪ Internet connectivity, e-mail and website services established in central and zoba education offices ; ▪ A national EdTech Lab and e-learning center established; ▪ ICT resource centers at central and regional education offices replenished and revitalized. | <ul style="list-style-type: none"> ▪ Reports by ICT division ▪ Reports by Zoba Education Offices | <ul style="list-style-type: none"> ▪ Commitment of Government and MoE |
| <p>4. Build human resources capacity in integration, management and utilization of ICT in Education</p> <p>4.1 Build the capacity of ICT master trainers on the management and utilization of ICT-in-Education in schools;</p> <p>4.2 Build the capacity of education management and</p> | <ul style="list-style-type: none"> ▪ ICT master trainers, education managers, teachers and operations staff trained on integration, management and utilization of ICT in Education; ▪ ICT master trainers trained on the management and utilization of ICT-in-Education in schools; ▪ Education management and operations staff trained on utilization of ICT for educational planning and management; ▪ Mainstream subject teachers trained on the integration and utilization of ICT for teaching/learning and educational management; ▪ Solar energy technicians trained and equipped with essential tools | <ul style="list-style-type: none"> ▪ Training reports submitted | <ul style="list-style-type: none"> ▪ Commitment of Government and MoE |

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| <p>operations staff on utilization of ICT for educational planning and management</p> <p>4.3 Build the capacity of mainstream subject teachers on the integration and utilization of ICT for teaching/learning and educational management;</p> <p>4.4 Build the capacity of solar energy technicians and equip them with essential tools and equipment for effective installation, servicing and maintenance.</p> | <p>and equipment.</p> | | |
| <p>5. Establish and implement a system of Electronic Waste (E-waste) Management and safe disposal of Obsolete ICT equipment and accessories</p> <p>5.1 Strengthen the planning and coordination of inventory and asset management, E-waste management, and safe disposal of obsolete ICT equipment and accessories</p> <p>5.2 Ensure the implementation of safe, hazard-free and healthy E-waste management practices</p> | <ul style="list-style-type: none"> ▪ A system of Electronic Waste (E-waste) Management and safe disposal of Obsolete ICT equipment and accessories established; ▪ Planning and coordination workshop on inventory and asset management, E-waste management, and safe disposal of obsolete ICT equipment and accessories conducted; ▪ Obsolete ICT equipment and accessories collected, packed and transported for safe disposal; ▪ Environmentally safe, hazard free and healthy utilization of ICT in Education realized. | <ul style="list-style-type: none"> ▪ Reports by ICT division ▪ Reports by Zoba Education Offices | <ul style="list-style-type: none"> ▪ Commitment of Government and MoE |
| <p>6. Enhance the institutional capacity of the education sector in relation to the deployment, accessibility and utilization of ICT</p> <p>6.1 Conduct national survey on the deployment, accessibility and utilization of ICT in teaching and</p> | <ul style="list-style-type: none"> ▪ Systems and instruments for deployment, accessibility and utilization of ICT developed; ▪ National survey on the deployment, accessibility and utilization of ICT in teaching and learning, educational planning and management conducted; ▪ EMIS infrastructure established; schools, regional education offices and central MoE connected; ▪ EduTrac, rapid school monitoring system established and expanded; | <ul style="list-style-type: none"> ▪ Report of survey findings submitted ▪ Report by MoE ▪ Impact survey report submitted | <ul style="list-style-type: none"> ▪ Commitment of Government and MoE |

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| <p>learning, educational planning and management;</p> <p>6.2 Establish appropriate EMIS infrastructure for connecting schools, regional education offices and central MoE for effective and efficient management of information across the education sector;</p> <p>6.3 Establish and expand an SMS-based data collection, analysis and reporting system (EduTrac) for rapid school monitoring;</p> <p>6.4 Assessment survey on the impact of ICT in improving quality of educational planning, management and students' learning and achievement</p> | <ul style="list-style-type: none"> ▪ Assessment survey on the impact of ICT in improving quality of educational planning, management and students' learning and achievement conducted. | | |
| <p>Education and Emergency</p> | | | |
| <p>1. Implementing emergency and disaster reduction policy and strategy</p> <p>1.1 Advocated for the implementation of the emergency and disaster risk reduction strategy</p> | <ul style="list-style-type: none"> • Finalize the Education in Emergencies and Disaster Risk Reduction Policy • Provide clear strategic action plan and set up implementation procedures and resources to establish optimal levels of preparedness at systemic, institutional and individual levels | <ul style="list-style-type: none"> • Finalized policy • Finalized action plan | <ul style="list-style-type: none"> • Commitment of MOE's officials and regional officers • Commitment of regional administration branches and communities. |

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| <p>2. Ensure that all children have access to a safe learning space before, during and after emergencies.</p> <p>2.1 Implement structural (e.g school buildings, playing grounds...) and non-structural mitigation measures in selected schools</p> <p>2.2 Sensitize children and the school community on emergency and disaster preparedness and safety measures and opportunities through information sharing</p> <p>2.3 Establish clear standards, maintain and enhance quality education for all through the provision of education during and after emergencies</p> | <ul style="list-style-type: none"> • Design new or retrofitted buildings according to established building codes and safety standards • Support children affected by emergencies through provision of supplies • Incorporate national or local early warning systems and norms into school plans • Organize realistic simulation drills/exercises to test disaster preparedness plans and skills levels regularly • Mainstream emergency and disaster risk program education in the national curriculum and in teacher training programs. | <ul style="list-style-type: none"> • No of schools retrofitted and equipped with safety standards • No children enrolled • No schools with early warning systems • No schools conducted regular drilling and simulation exercises • Education in emergency program integrated with national curriculum | <ul style="list-style-type: none"> • Commitment of MOE's officials and regional officers |
| <p>3. Ensure that an effective coordination mechanism and information and data management system are in place and disseminated timely</p> <p>3.1 Motivating the direct participation of key sectors, community and partners in activities that would help to build a disaster resilient community</p> | <ul style="list-style-type: none"> • Set up a disaster management focal point within the MOE to oversee implementation of policy framework • Clarify the roles and responsibilities of all school personnel, teachers, students and partners in school Emergency and Disaster Preparedness/ Management | <ul style="list-style-type: none"> • Established education in emergencies focal persons points at zoba and sub-zoba levels • Clearly established roles and responsibilities | <ul style="list-style-type: none"> • Commitment of MOE's officials and regional officers |

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| <p>4. Strengthen the capacity at national, zoba and sub-zoba, school and community levels to develop, implement and monitor education in emergency plans</p> <p>4.1 Building the Emergency and Disaster Preparedness capacity of MOE officials, teachers and students at national, zoba, sub-zoba and school levels</p> | <ul style="list-style-type: none"> • Establish school emergency- disaster management/ school safety committee at school level • Conduct capacity development of education officers, supervisors, and PTSA training at Regional level for all regions | <ul style="list-style-type: none"> • Number of schools with established safety committee • Capacity development of education officers, supervisors, administrators developed | <ul style="list-style-type: none"> • Commitment of MOE's officials and regional officers |
| <p>5. Ensure the participation of all teachers and students and commitment of parents, communities, partners, in the implementation emergency and disaster risk reduction plan.</p> <p>5.1 Carrying out Information, Education and Communication (IEC) activities in schools and their communities</p> | <ul style="list-style-type: none"> • Updating teacher training modules • Develop IEC materials for EiE • Training teachers in education in emergency through module | <ul style="list-style-type: none"> • Emergency and disaster risk reduction manuals developed • IEC materials developed • Number teacher trained in emergency | <ul style="list-style-type: none"> • Commitment of MOE's officials and regional officers |
| Culture, Sport and Health | | | |
| <p>1. Strengthen the Social and Behavioral Change</p> <p>1.1 Raise the knowledge of teachers, PTSA members and students on HIV & AIDS, malaria TB and SRH prevention.</p> <p>1.2 Enhance the capacity of peer facilitators and coordinators</p> <p>1.3 Develop a training manual on HIV, TB SRH and malaria control & pre elimination messages for junior, senior, TVET & Adult</p> | <ul style="list-style-type: none"> • 2500 teachers raised their comprehensive knowledge and equipped with basic skills of preventing HIV, Malaria, TB and SRH diseases and share their skills to their students • 600 PTAS members trained and play their role in raising comprehensive knowledge of their school community • 300 teachers of 150 junior, secondary, TVET schools trained on how to support students of 150 schools on raising comprehensive knowledge of HIV, malaria, TB and SRH • 300 peer facilitators trained on how to facilitate the updated training manual and support peer educators • tudents of 30 schools of the six zobas benefited and influence others who are not targeted in the program • 150 schools equipped with the training manual and peer educators | <ul style="list-style-type: none"> • Records of the trainees' • Training report • Training manual • Printed materials, and • Supervision monitoring and activity reports | <p>Commitment of MOE's officials and regional officers</p> <p>Commitment of regional administration branches and communities.</p> |

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| literacy program | <ul style="list-style-type: none"> familiarized on how to use the material Printing of 2000 copies of life skills based health education material that support the peer to peer teaching | | |
| <p>2. Enhance the sport physical and material facilities of schools</p> <p>3.1 Expand and renovate the schools physical sports facilities</p> <p>3.2 Strengthen physical education of schools through the provision sport materials</p> | <ul style="list-style-type: none"> Students identified their skills and got a chance to be a role model for others. The event created a room to convey positive living behaviours. 150 sport teachers trained and shared their experience to their students | <ul style="list-style-type: none"> No. of sport competition events Records of the trainees' Training Workshop reports Supervision and activity report | Commitment of MOE's officials and regional officers |
| Curriculum Review and National Standards for Quality Education | | | |
| <p>1. Improve relevance of the curriculum</p> <p>1.1 Review Curriculum of all levels</p> <p>1.2 Finalization process and Printing of national Curriculum Framework</p> | <ul style="list-style-type: none"> Needs assessment survey conducted and data processed and analyzed Curriculum Needs assessment report prepared and disseminated National curriculum Framework prepared, printed and disseminated | <ul style="list-style-type: none"> Survey report Needs assessment report, and report on dissemination Printed copy of National curriculum Framework, and report on dissemination | Ministry's commitment to undertake the curriculum review plan |
| <p>2. Introduction of National standards for quality education</p> <p>2.1 Developing National standards for quality education</p> <p>2.2 Printing and dissemination of National standards manual for quality education</p> | <ul style="list-style-type: none"> National standards manual prepared, printed and disseminated Number of printed copies of National standards manual | <ul style="list-style-type: none"> Report from DGE Printed copy of National Standards manual for quality education | Commitment of MOE's departments and regional offices, |