



OVERVIEW OF THE EDUCATION MINISTRY OF EDUCATION

ERITREA

July 2012

TABLE OF CONTENTS

	Pages
ACRONYMS	2
I. Introduction	3
II. Education Reform	4
III. Institutional Context	5
A. Expanding equitable Access	5
1. General Education	5
1.1 Basic Education (Elementary and Middle school education)	5
1.1.1 Pre-school	5
1.1.2 Elementary and Middle Levels	6
1.2 Secondary Education	8
2. Technical and Vocational Education and Training (TVET)	9
3. Adult and Non-Formal Education	11
4. Girls' and Women's Education	15
5. Teacher Supply	15
6. Inclusive Education Program	16
B. Improving Quality/Relevance of Education	16
1. Curriculum Planning and Development	16
2. Monitoring and Quality Assurance	17
3. Assessment and National Examination	18
4. Teacher Development	18
5. ICT in Education	20
IV. Higher education	21
V. Institutional Capacity Building	23
VI. Financing Education	24
VI. Conclusion	25

ACRONYMS

ACHS	Asmara College of Health Sciences
ATEI	Asmara Teacher Education Institute

BE	Basic Education
CASS	College of Arts and Social Sciences
CBE	College of Business and Economics
COMSAT	College of Marine Science and Technology
CRA	Criteria Referenced Assessment
DE	Distance Education
EIT	Eritrea Institute of Technology
EFA	Education For All
EMIS	Educational Management Information System
ESDP	Education Sector Development Program
ESECE	Eritrean Secondary Education Certificate Examinations
GER	Gross Enrolment Ratio
GoSE	Government of the State of Eritrea
HAC	Hamelmallo Agriculture College
IHE	Institution(s) of Higher Education
LAPG	Learner Progression and Assessment Guide
MDG	Millennium Development Goals
MLA	Monitoring Learning Achievement
MOE	Ministry of Education
NACVOT	National Center for Vocational Training
NBHE	National Board for Higher Education
NER	Net Enrolment Ratio
OSM & DM	Orotta School of Medicine and Dental Medicine
PRC	Pedagogic Resource Center
PTSA	Parent Teacher Student Association
TVET	Technical and Vocational Education and Training

I. Introduction

Eritrea cognizance of the importance of education and training for the development of the country it develops the knowledge and skills required for a vibrant, competitive

economy. It fosters social development and equality among the people. It enables people to generate increased income and lift themselves out of poverty.

For these reasons, the Government of the State of Eritrea considers education to be the cornerstone of all national development efforts, particularly in human resources development, economic growth and poverty alleviation. Accordingly, it is making significant investments in the development of human resources by providing education and health services for the entire people, so that they are able to fully participate in the civic, cultural, political, social and economic affairs of their nation.

Since the culmination of the long war for independence from Ethiopia, the Government of Eritrea has embarked on a wide ranging programme designed to rehabilitate and reconstruct the shattered economy and promote the country's overall development. The vision for the country's future development is based on the concept of human capital formation, with education a key input. Thus, soon after the liberation of the country in 1991, education was placed among the top priorities of the Government. Unfortunately, the attempt to reconstruct and develop the nation has again been hampered by the border conflict with Ethiopia, which erupted in 1998.

Despite all these challenges, the Government has done remarkably well in terms of reconstructing and rehabilitating the education system and human capital formation

Eritrea is committed to universal themes of "Education for all" (EFA), as adopted by the World Conference on "Education for All" (EFA) in Jomtien, Thailand in 1990, and further expounded in the Dakar Conference of 2000, where the provision of education to out-of-school children was incorporated as part and parcel of EFA themes. In addition, as part of its commitment to meet the Millennium Development Goals (MDGs), it has formulated the following EFA goals:

- ◆ Significant expansion of integrated, low-cost and community based early childhood development programs of high quality with 80 percent of the children reached by 2015 through formal and non-formal basic education.
- ◆ Universal access and quality primary education for all to BE (Basic Education) by 2015, and more than 80 percent of the relevant age group completing formal basic education.
- ◆ To reduce adult male illiteracy to about 10 percent, and female literacy parallel to that of the male in 2015.
- ◆ Expanding 'life-long learning' to achieve a modern cultural transformation among the disadvantaged groups in rural areas.
- ◆ Ensure gender equity at elementary and middle level and decrease the gender gap substantially at secondary level by 2015.

II. Education Reform

Immediately after independence, the Government of Eritrea took a number of important steps, such as the provision of free and compulsory basic education, instituting a secular curriculum and the right to learn in one's own language at the primary level, reducing the gender gap in enrolment and retention and giving priority to regions which had in the past been deprived of educational opportunities due to war and other factors.

In 1994, on the basis of its National Macro-Policy, the Government outlined a vision for the creation of a modern, technologically advanced and internationally competitive economy. This policy emphasized improved agricultural production, knowledge intensive and export oriented industries, and broad based educational provision that incorporates widespread dissemination of skills. The overall objectives of education were formulated as follows:

- ◆ to produce a population equipped with the necessary skills, knowledge and culture for a self-reliant and modern economy, and
- ◆ to make basic education available for all.

With the overriding aim of providing access to quality education that is responsive to the individual and national development needs and takes note of the special circumstances of specific groups of children, such as the hard of hearing, the visually impaired, nomadic, etc, the State of Eritrea carried out a comprehensive study in 2002 and came up with a 'Concept Paper for a Rapid Transformation of the Eritrean Education System'. The Concept Paper highlighted the need to make all the necessary changes to enable the Eritrean education system to measure up to the needs of the country and stipulated abolishing all wastage of manpower, resources, efforts and time in the education system, opening all doors and opportunities for professional and personal development of Eritreans of all ages, making the Eritrean education system employment oriented, and improving the quality of education and training so as to make it internationally competitive.

In spite of these impressive achievements gained since independence (1991), the education system still faces major challenges in its pursuit to provide equitable access to quality education and training for all school-age children and adults. The main challenges are:

- ◆ Low access and equity
- ◆ Poor quality and relevance
- ◆ Low internal efficiency, and
- ◆ Limited institutional capacity

On the basis of the Concept Paper, and in order to realize the objectives of the envisaged educational reform, the Government prepared a five years Education Sector Development Programme (ESDP), (2005-2009). The main objectives of the ESDP are to increase equitable access to basic and secondary education, improve the quality of basic and secondary education, develop vocational, technical and technological skills, and strengthen institutional capacity to deliver better quality education services. Through the implementation of ESDP access at all levels and sub-sectors has substantially increased, quality of education improved and institutional capacity enhanced.

III. Institutional Context

A. Expanding Equitable Access

1. General Education

This sub-sector comprises three levels, namely, basic education (pre-primary, elementary and middle) and secondary levels. It also includes curriculum planning and development, supervision, assessment and quality assurance.

1.1 Basic Education (Elementary and Middle Levels education)

Basic education is the first component and the highest priority in the Eritrean Education Sector Development Programme. It is also a part of the country's commitment to the Education for All (EFA) and Millennium Development Goals (MDGs). In the Eritrean education system, the pre-primary is two years duration, the elementary level comprises of grades 1-5 and the middle level grades 6-8.

1.1.1 Pre-school

Pre-primary schooling is part and parcel of the Eritrean basic education system and is of two years duration. It is provided in two forms, i.e. kindergartens and community care-giving centers. Currently, there are 160 pre-primary schools in urban localities and 314 in rural localities. The pre-primary schools have increased from 91 to 476. Out of these, 237 are kindergartens and 239 are Community Care Giving Centers. The main objective of pre-school education is to socialize children by developing their knowledge, skills and attitudes and to prepare them for the next educational level. In addition, it aims at developing the child's creativity, self-esteem and sociability. The Government of Eritrea believes that investment in early childhood development is directly related to the promotion of child rights, sustainable human resource development and basic education for all. As a result, access to pre-primary education has improved significantly particularly in rural areas. For instance, the gross enrolment had gone up from 6,461 (GER-4.3%)¹ in 1991/92 to 46,108 (GER-21.6%) in 2010/11 and the net enrolment has increased from 9,471 (GER-4.9%) in 1999/2000 to 31,084 (GER-14.6%) in 2010/11 (Chart 1).

Chart 1: Gross and Net Enrolment Ration of Pre-primary Level by Gender, 2010/11

¹ It is to be noted that population census has not conducted in Eritrea. All enrolment indicators in this document are calculated based on population estimation made by the National statistics office and may change with the exact population figure when census is done.

1.1.2 Elementary and Middle Levels

Currently, there are 833 elementary schools and 302 middle schools in the country, with the majority 663 (79.6%) and 215 (71.2%) schools respectively in rural areas and in formerly underserved regions. Enrolment at the elementary level has increased from 150,982 in 1991/92 to 311,589 in 2010/11. Similarly, at the middle level enrolment has increased from 27,917 in 1991/92 to 154,589 in 2010/11. At the elementary level, the mother tongue is the medium of instruction, and, so far, the Government is providing instruction in 8 ethnic languages. The objective in elementary and middle level education has been to enable all school-age children complete elementary education with 80% of them at least obtaining the minimum learning achievement as defined by the curriculum and to achieve gross enrolment rates more than 100% and 60% at the elementary and middle school levels respectively by the year 2015. However, despite all the commendable efforts enrolment at both levels still remains quite low. At the elementary level the gross enrolment is just about 71.6 % while at the middle school level it is only around 52.4% in the academic year 2010/1 (Chart 2).

Chart 2: Gross Enrolment Ratios of Elementary and Middle Level by Gender, 2010/11

At the basic level of education, there are two fundamental concerns regarding equity. The first is to ensure that everyone has a basic education – the basic competencies necessary to function effectively in society. The second is to ensure that all potentials students are not denied access to institutions because they are poor or female, are from ethnic minorities, live in geographically remote areas, or have special educational needs. In both cases, the initial success of any initiative to cater for out-of-school children will depend, to a large extent, on the commitment of the government at all levels.

These challenges do not leave any room for complacency. As a result, a study has been carried out and a program proposed for providing educational opportunities for children out-of-school, particularly those in the range of 10-14 years who, for some reason or another, could not get the chance to join or complete basic education. Based on the proposed program a pilot Complementary Basic Education Program has been launched and scaled up every year to reach the target children mentioned above.

There is also a growing awareness by the international community that the target of Education for All (EFA) by 2015 will not be met by some countries unless efforts are made to improve access to schooling for the disadvantaged and hard-to-reach children. Among these include school age children from nomadic pastoralist groups.

Notwithstanding the fact that the Eritrean nomads are at the bottom of national statistics in school enrolment, participation, classroom performance, gender balance,

achievement and progression, the long term strategy of the Government of the State of Eritrea (GoSE) is to settle all nomadic groups in permanent area so that they enjoy the provision of basic services including that of water, education and health facilities. However, the provision of basic socio-economic services to nomads poses a great national challenge for the following reasons: a) the majority of the nomadic pastoralists live in harsh climatic conditions with poor pasture and water resources, forcing them to be in constant movement and hence the difficulty of bringing about change aimed at improving communities and the active involvement of implementing partners and stakeholders. The need to raise the awareness of the beneficiary communities is also recognized to be an essential pre-condition to launching development activities.

A national workshop was convened to identify strategies to make education in Eritrea more accessible and beneficial to children from nomadic education. The approach followed was to build consensus on nomadic education through involving the main stakeholders on the basis of Eritrea's experience and the experiences of other countries. The workshop had the following three main objectives:

- ◆ To ascertain the current state of nomadic education in the country and identify the main impediments to nomadic children's enrolment and the causes of early dropout from schooling.
- ◆ To set up a general framework for nomadic education in Eritrea.
- ◆ To make recommendations for appropriate strategies and implementation plans for the effective and equitable delivery of educational opportunities to nomadic communities.

The workshop has also discussed extensively the issues of curriculum adaptation, community, teacher, school structure and mode of education delivery, financing nomadic education and policy development.

Based on the recommendations of the workshop pilot nomadic schools have been launched in areas where nomadic communities resided. Teachers for nomadic schools were trained and basic educational materials has also provided to the schools. Scaling up of nomadic schools has also made on the basis of studies made by regional education offices.

Recently, a guideline for nomadic education has prepared and discussed with the relevant stakeholders. Following the inputs from the workshop the guideline has been finalized and disseminated.

1.2 Secondary Education

The provision of increased and equitable access to secondary education of good quality plays a central role in the education and employment system. The Government of Eritrea believes that development of modern economy depends to a large extent on the supply of well educated and trainable secondary school graduates. It also believes that secondary education is an essential foundation for the human resources development required to build a competitive economy, and contributes to the improvement of health and enhanced social participation.

Chart 3: Gross Enrolment Ratio of Secondary Level by Gender, 2010/11

The Government has been working hard to bring secondary schools closer to rural areas and other hard to reach groups. Thus, since independence, the number of secondary schools has increased significantly from 25 in 1991/92 to 89 in 2010/11. 38 (42.7%) of the 89 secondary schools are located in rural areas. Enrolment has markedly increased from 27,627 in 1991/92 to 100,027 in 2010/11. Moreover, under the education reform the introduction of integrated secondary education with a focus in science and technology is in progress. This integrated secondary education includes core and enrichment subjects, the later of which comprises practical aspects for preparing students for employment. At the secondary level the gross enrolment has increased from 13.1% in 1991/92 to 23.8% in 2010/11. During the same period net enrolment ratio has increased from 9.1% to 17.4% (Chart 3)

2. Technical and Vocational Education and Training (TVET)

Skills development is considered essential for Eritrean economic growth. It is also regarded as a key strategy for wage and self-employment. The production of high-quality human capital who are highly trained and capable of mastering and exploiting available technology for socio-economic development of the country has given a top priority. In this regard, Technical and Vocational Education and Training (TVET) sub-sector in Eritrea aims to produce semi-skilled and skilled intermediate level technician in order to meet the demand for labour and improved productivity.

The overall objectives of this sub-sector are to align the skills development system with the needs of employers, the labour market at large and the country's economic development priorities, and to raise the quality in order to increase the productivity of enterprises and the incomes of individuals.

To achieve this, the TVET sub-sector is in the process of developing an outcome based curricula; strengthening instructor training at all levels, and reequipping existing technical schools as well as establishing new ones and developing textbooks for the trades offered.

Meanwhile, the number of technical schools had increased from 2 in 1991/92 to 6 in 2010/11, and enrolment, from around 350 to more than 4640 during the same period. The Government is currently engaged in a sizeable expansion and development of the whole sub-sector. As a result, it has expanded the technical and vocational education by opening a National Center for Technical and Vocational Training that comprises of five vocational schools which has enrolled more than 2500 students every year since

2007. A remarkable feature of this expansion has been the increase in female enrolment from 19% in 1991 to 49% in 2010/11 academic year (Chart 4).

In the past decades considerable progress has been made to promote the provision of technical and vocational education and training in Eritrea. Among these are:

- ◆ The establishment of five skill development centers;
- ◆ The construction of two technical schools and two agricultural schools at the secondary school level;
- ◆ A commercial school and a technical institute at advanced level;
- ◆ The construction of technical and commercial school in Massawa;
- ◆ The establishment of National Vocational Training Center (NAVCOT); and
- ◆ Technical and vocational education and training has been modestly provided by various providers.

**Chart 4: Technical and Vocational Training – Intermediate Level
Enrolment by Gender and Year, 2005/06 – 2010/11**

As a result of the above mentioned interventions enrolments in Technical and Vocational Education has substantially increased from 1547 in 2005/06 to 4640 in 2010/11 (Charts 4 and 5).

**Chart 5: Total Enrolment in NAVCOT and Technical Schools,
2007/08 – 2010/11**

3. Adult and Non-Formal Education

In view of the Government's policy of life-long learning the objectives of adult education are to eradicate illiteracy and to provide extensive educational and training opportunities to adult citizens so that they can continually upgrade themselves and realize their potentials to the full. Currently, the Government is engaged in providing literacy and post literacy programmes to adults, as well as schooling opportunities to out of school youth. It has also been endeavoring to create literate environments through the establishment of rural libraries for newly literate citizens and to provide educational programmes to the general public through the radio.

During the last five years, for example, literacy programmes have been conducted in a number of ethnic languages in more than one thousand literacy centers and about 70 rural libraries have been established. Moreover, the Ministry has broadcasted various educational radio programmes on issues related to health, agricultural, and social affairs in five local languages. In line with one of the EFA Goals, the Government is engaged in reducing the illiteracy rate to about 10% by 2015.

The experience of adult education during the armed struggle for independence provided considerable impetus and footing in initiating adult education activities after independence. Funded by the Government of Eritrea and developmental partners, National adult literacy program has launched since 2000. This program is rightly aligned to the proposal made to consider ‘Adult literacy and non-formal education’ as one of the priorities in the Fifth Ordinary Session of the Conference of Ministers of Education of the African Union (COMEDAF).

In the past 12 years, the Ministry of Education has made concerted efforts to the development of relevant curriculum and preparation of materials in local languages, consistent advocacy and information communication via varied media (including radio, TV ...), giving emphasis to disadvantaged areas and section of the society such as women and the rural areas by allocating about 13 million Nakfa annually. During the past ten years (2000-2010) about 2500 adult literacy facilitators/teachers were recruited annually on part time basis to facilitate adult literacy and post literacy programs.

As the result of the endeavour more than 623,000 (89% women) has been provided education in the past ten years (2000 – 2010) with an average of more than 70 percent completion rate. In terms of participation by age, about 40 percent of the total enrollees were youth 15 – 24 years old and 82 percent within 15 – 45 age bracket which is the main target of the literacy program. Enrolment in adult literacy centers was the highest in 2005/06 at the time when the First Decade of Education for Africa officially launched. In this academic year more than 100,000 youth and adults enrolled in more than 1000 learning centers guided by about 3000 facilitators in 8 local languages. Although enrolment decreased in the subsequent years, adult literacy rate has reached 67 percent with male literacy rate 73.6 percent and female literacy rate 56.5. Whereas youth literacy rate was estimated at about 88 percent (91% for male and 84% for female), (National Literacy Survey 2008).

Moreover, as indicated in the Global LIFE Mid term evaluation report, Eritrea is one of the few LIFE countries that showed progress in decreasing illiteracy rate. The report showed that literacy rate in Eritrea was increased from 52.5 percent in 1994-2004 to 66.6 in 2005-2009 (14.1 percent decrease of illiteracy rate – UIL/UNESCO 2012). This is an encouraging development and Eritrea is committed to maintain this achievement and scale up implementation of literacy activities in accordance to the action plan set until 2015. The primary objectives will therefore be to reduce adult literacy rate to at least 10 percent (from about 26%) and the gender literacy disparity to less than 10 percent (from about 17%).

Since 2007 an alternative crash program for out of school children 9-14 years old has been also introduced as complementary Elementary Education in which more than 12,000 boys and girls enrolled (about half girls) and more than 800 mainstreamed to the formal system at middle level.

The statistics of the Ministry of education showed that more than 78,000 adults (about 88% of which women) completed the intended courses of literacy and post literacy (3rd level) since 2000. Literacy and post literacy is an 18 months courses (extended in 3 years) which is equivalent to successful completion of elementary level at the formal school. Women and girls residing in remote rural areas have been the main

targets of the adult literacy and alternative education for out of school children. Basic education is also provided by the Ministry of Defense for the soldiers (majority men) and in the Prison and Rehabilitation centers to complement the effort being made to combat illiteracy in the country and provide access to basic education.

Currently, the illiteracy rate has been reduced from about 80% during independence (1991) to about 26 % in 2010. It is encouraging to note that around 84.2% of the youth population (15-24 years old) and 74% (88.3% men and 62.4% women) adults age 15-49 are literate (EPHS, 2010).

The major priority areas in adult and non-formal education in the coming years include: increase equitable access to basic literacy and reduce illiteracy to its lowest level; ensure quality and relevance in literacy and continuing education programs for children youth and adults; create literate environment (open more community reading rooms- currently there are 90 through out the country) to sustain literacy skills acquired in learning centers and promote self-learning; work with concerned partners to integrate literacy with varied education and training (such as vocational skills) to assist learners continue their learning and be able to use it in their daily life and work conditions; capacity building of adult education personnel working at different levels to discharge their duties effectively and efficiently and ensure adequate budget to implement planned activities to the level of expectations.

4. Girls' and Women's Education.

Girls' education in Eritrea has been recognized as a fundamental human right and developmental necessity. Further it is believed that, educating women and girls has an impact in family, community and the nation. Thus, the participation, retention, and achievement of girls in education have been one priority areas of concern.

Efforts have been put in place to bridge gender disparity in education and enhance quality of girls' education. This is based on the rights approach, which is in line with the Convention for the Elimination of All of Discrimination against Women (CEDAW). Whilst the central focus is clearly to enhance Girls' Education in terms of access, quality and achievement, it is emphasized that this would also contribute to the achievement of the MDGs and EFA goals on girls' education and empowering women in the long run. Some of the strategies and interventions made on Girls' Education are outlined below.

- ◆ A nation wide assessment on Eritrea's experience on girls' and other disadvantaged groups' was conducted in 2004/05. The review has by and large focused on girls' education and assessed how communities view educating the female. This study revealed that a variety of factors from home, community, and school affect girls' education. Based on the findings of the study an Action Plan of five years (draft) was prepared to enhance girls' participation in school.
- ◆ Enhancing community feeder schooling has been in progress. The objectives of the community feeder schooling were to raise the participation of girls in primary schools, resolve the problem of distance to schools, thereby enabling young female and male children to enroll.

- ◆ Raising awareness and sensitization activities in communities on girls' education was strengthened in collaboration with the National Union of Eritrean Women and the National Union of Eritrean Youth and Students.
- ◆ Based on the studies made and other factors that affect girls' education, the MOE has prepared Communication Strategy on Girls' Education.

Chart 6: Elementary, Middle and Secondary students GPI based on Gross Enrolment

In 1991/92 girls' enrolment at Pre-primary was 3,319 (GER-4.6%) and increased to 23,719 (GER-21.2%) in 2010/11. Over the same period at elementary level girls' enrolment has increased from 69,236 (GER-39.2%) to 139,584 (GER-66.5%) and at middle level from 13,503 (GER-21.2%) to 68,588 (GER-48.5%) respectively. At secondary level girls' enrolment has increased from 13,346 (GER-13.3%) to 42,684 (GER-20.8%) over the same period.

However, significant differences exist between boys and girls in school enrolment, as seen in the female gender parity index (Chart 6). The gap for girls grew wider at successive stages of the education system.

The participation of girls and women in technical-vocational education and training has also been low. Only about 19% of the students enrolled in vocational schools in 1991 were female. In the academic year 2010/11 girls' enrolment has substantially increased to 49% in all technical and vocational institutions. These fields are perceived as male domains, yet they are areas where women could acquire important employable skills.

Significant differences also exist in rates of adult literacy by gender. In 2010 it is estimated that 88.3% of Eritrean men were literate, compared with only 61.4% of the women (EPHS 2010).

The factors that impede girls' education are from both the supply and demand side:

- ◆ Educational factors (supply side) - shortage of schools combined with overcrowded classrooms; shortage of female teachers; inadequate trained teachers in mother tongue; inadequate of sanitation facilities; excessive distances to school; low relevance of the school curriculum to local realities and inadequate supply of learning and instructional materials.
- ◆ Environmental (demand side factors: poverty including inability to afford the direct costs of schooling as well as the indirect, opportunity costs (demand for children's labour); long distance to schools; limited parental and community involvement in schooling; social and cultural obstacles, such as early marriage and undervaluing the benefits of education.

The inadequate supply of female teachers is linked to low female enrolment. Only 41%, 14% and 14% of the teachers at elementary, middle, and secondary are female. Similarly, gender issues have not been sufficiently integrated into the curriculum at both school and teacher training levels. However, since 2004 the curriculum has been revised and made it gender sensitive. Another important barrier to girls' (and other disadvantaged children's) participation in education is the domestic responsibilities assigned to them. Girls, more than boys, are expected to carry out domestic chores such as fetching water, collecting firewood, caring for siblings and grinding work. The MOE has prepared Girls Education Policy and strategy in recognition of the fact that sustainable development cannot be realised without the full and equal participation of girls at all levels of education.

In addition, the Government has provided guidance and counseling services to help girls overcome problems that affect their education; provide girls from low-income families with financial support as an incentive to compensate for the opportunity costs of their attendance; and conduct extra tutorial classes to girls in need of support in core subjects where they lag behind.

5. Teacher Supply

Inadequate teacher supply exerts constraint on the capacity of the Ministry to expand/improve enrolments, particularly at the middle and secondary levels. At, only one regular teacher training institute is mandated with responsibility of preparing teachers for the elementary school system. The Asmara Teacher Education Institute (ATEI) has been offering a one year pre-service teacher preparation for secondary school graduates and has been graduating about 600 elementary teachers every year. The College of Teacher Education (attached to the Eritrea Institute of Technology) started a two-year diploma course for middle school teachers and a four year course for secondary schools. Teachers for middle and secondary schools are recruited from among graduates in the various colleges, on average about 900 and 800 respectively per year. In addition, the Ministry recruits about 150 expatriate teachers annually. Plans were made to enrol more teachers per year for secondary schools and technical schools at the College of Teacher Education and other colleges to fill the gap. Continued recruitment will be necessary of expatriate qualified teachers at secondary level over the next five years. Apart from graduates from the college of Education, most recruits from various colleges are unlikely to have firm grounding in educational theory and practice. Teachers with shorter initial training programmes will require intensive in-service training and follow-up on the job.

6. Inclusive Education Program

The Eritrean National Education Policy notes that education is a fundamental human right and life long process. Hence, to realize equal educational opportunity, the government believes that schools should accommodate all children irrespective of their physical, intellectual, social, emotional and other disabilities. Although, in principle education is inclusive, schools have not the required capacity to meet the diversified needs of learners and this remains a major challenge. With limited resources the government is making some intervention to promote inclusive education and practice through various mechanisms. The use of alternative means of increasing access to education, the ongoing reform to enhance the quality of learning experience

and provision of educational support are the major inputs being undertaken to facilitate inclusive education.

In the past few years efforts have been made to enhance inclusive education through the following interventions:

- ◆ A policy and strategy on Inclusive Education in Eritrea has been developed.
- ◆ Curriculum accommodation or modification is undergoing to suit the educational needs of children in diverse classrooms, particularly those with 'special' educational needs.
- ◆ Many teachers and members from the communities in the six regions received an orientation on inclusive education principles. Teachers have been trained to make adaptations to suit the needs of children with disabilities.
- ◆ Pilot special needs education with the concept and implementation of inclusive education was conducted in 9 elementary, 1 middle level school and in three special schools in three regions.
- ◆ More than 4000 basic education teachers received training on inclusive policy and practices.
- ◆ A guideline on educational support in inclusive setting has been developed. About 700 teachers from the six regions trained on learning support in inclusive schools.
- ◆ 25 special classrooms within 25 elementary schools in different regions were constructed and equipped for students with special needs.

B. Improving Quality/Relevance of Education

1. Curriculum Planning and Development

As part of the governments' decision to undertake strategic transformation of education, MOE, since 2003 has made a comprehensive curriculum review and is continuing. Following needs assessment survey and situational analysis carried out in 2002 a new National Curriculum Framework has been developed. Since then a substantial progress has been achieved in terms of articulating the new curriculum, developing procedural guidelines, designing of syllabus, developing scope and sequence, and writing of textbooks. To date a total of 500 titles of text books have been developed, printed and distributed for general education. Significant efforts have also been made to ensure participation of teachers in curriculum development processes and to familiarize them with the newly produced materials so as to implement them effectively. Adult education curriculum has also reviewed and will continue the process.

In addition, at the secondary school level the introduction of enrichment learning areas in the curriculum provide learners with an orientation to the world of work by developing some practical skills and work related habits. Moreover, in order to consolidate the educational support system and enhance learning through the introduction of ICT as a subject and teaching/learning tool, computer laboratories were established in middle and secondary schools and are being equipped with computers. E-learning materials of the secondary school syllabus has been identified and systematically compiled for use in schools.

In the last five years almost all secondary schools were equipped with adequate laboratory chemicals, materials and equipment. A national conference on the Effective Usage of Science Laboratories in Secondary Schools has conducted and issued a manual called Safe and Effective Usage of Secondary School Science Laboratories. In addition school libraries were consolidated with modest number of books both from donation and through purchasing. Fine Arts and Sports equipment and other teaching materials have also been procured and distributed to schools to support teachers in the delivery of the new curriculum.

To improve the quality of the training in Technical and Vocational Education a competence based curriculum has been developed and textbooks are developing.

2. Monitoring and Quality Assurance

In order to improve the quality of education through the establishment of an effective and efficient monitoring and quality assurance system in the country various interventions were made in the last five years.

Policies, guidelines, rules and regulations, standards and manuals related to supervision, school organization and pedagogy have been developed to enhance the implementation of school-based support and supervision. Monitoring the implementation of the curriculum in schools has also been made. In addition, a study on the application of learner-centered and interactive pedagogy has been carried out and provides hands-on professional support to teachers and school directors. Different in-service training programs, workshops and seminars has also conducted for teachers, school directors and supervisors.

Moreover, the Pedagogic Resource Centers (PRC) strengthened through the training of PRC coordinators and equipping with basic tools and equipment. Efforts have also made to institutionalize school-based delivery of health and nutrition services. Monitoring of the opening and performance of nomadic schools has also been conducted. Sample schools were targeted to become child-friendly schools by providing materials and improving facilities. Endeavour has also made to consolidate the partnership of schools and community through the capacity-building of members of Parents Teachers and Students Associations (PTSA).

3. Assessment and National Examination

Assessment and national examinations is another means of ensuring the quality and relevance of education. Hence, it is linked to the aims of the curriculum and outcomes. To this end the MOE is in the process of exploring the development of appropriate forms of Criteria Referenced Assessment (CRA). This is implemented through principles of continuous assessment and it is expected to assess learners' competencies against agreed and explicit criteria of performance.

Moreover, monitoring of students' learning achievements have been conducted through regular national examinations at the end of basic education as well as by conducting Monitoring Learning Achievements (MLA).

In order to enhance the practice of continuous assessment a new guideline on Learner Assessment and Progression Guide (LAPG) has been developed and since 2010 piloted in some schools to ensure its effectiveness. In the last three years training and workshops on the new assessment guideline have also provided to teachers, directors, supervisors and other concerned bodies at national and regional levels. Preparation has been finalized to introduce in all schools.

4. Teacher Development

Since independence (1991) the MOE has made great efforts to improve the quality of education through the development of competent teachers for the general education and TVET. Although much progress has been made, still there are significant challenges in terms of meeting the requirement of adequate and competent teachers in the country. The analysis of the current situation in the education sector indicates that the shortage and the professional capacity of teachers have been among the major constraints on delivering quality education.

The above stated realities have been demanding for the MOE to come up with a Master Plan for Teacher Education and Development. The Master Plan recommends that teachers need to be carefully selected, adequately trained and properly assisted through pre-service and in-service programs in order to develop their competence and be supported to play their ever-widening roles effectively.

Since 1994 the Ministry of Education has been annually producing about 600 elementary teachers at Asmara Teacher Education Institute (ATEI). In addition, about 800 and 900 teachers for middle and secondary level schools respectively have been producing in the Eritrean Institute of Technology and other colleges. Moreover, a number of training programmes (in-service) have been organised in order to strengthen and upgrade the professional knowledge and competence of its serving teachers, education managers and other experts. The main interventions and the key dimensions related to the capacity building strategies in general and teacher education and development in particular, include:

- ◆ Provision of short term training courses (school-based, Zoba level and at National level)
- ◆ Organizing various workshops, seminars, exchange of best practices among schools and role model teachers and study tours abroad
- ◆ Provision of distance learning programs
- ◆ Award of Internal and External scholarships
- ◆ Consolidation of teacher education institutions

Under the in-service training programs various courses /training programmes have been conducted for about 10,000 teachers at various levels and sub-sectors during summer times.

Serving school teachers have been enrolled on a regular basis to various higher education institutes in Eritrea, mainly in Eritrea Institute of Technology and in College of Arts and Social Sciences, in Diploma and Degree programmes in various areas of specializations.

Trainings in educational research methodology have also conducted for about 350 secondary school directors, teachers and MOE officials at various levels of the sector.

In the area of pre-service training programs, 3,000 elementary school teachers were trained at a certificate level. A number of study materials such as life skills and fine arts were developed by the trainers in collaboration with international consultants. Asmara Teacher Education Institute (ATEI) curriculum was revised and a new curriculum for diploma program was also designed. Several awareness workshops were conducted at ATEI for the trainees. Teaching practice consolidation has been carried out annually.

About 2,080 under-qualified middle school teachers have been upgraded to a college diploma level via Open & Distance Learning Program (ODLP) in collaboration with Eritrean Institute of Technology (EIT).

Induction for newly appointed basic, middle & secondary school teachers was conducted annually.

The Ministry in collaboration with the Eritrea Institute of Technology (EIT) has trained 147 existing TVET instructors graduated at certificate and diploma level. In addition, another fourteen instructors have also completed a training course in methodology through in-service program graduating at certificate level. However, as the TVET schools are at intermediate level in the near future it is required the qualification of instructors to be upgraded to degree level.

5. ICT in Education

The Ministry of Education sees ICT as an integral part of the education experience, and envisions ICT to be a consideration at all levels and across all subjects defined by the national curriculum.

□ As part of the overall educational transformation process, the “ICT in Education” program was launched in January 2005. The policy orientation of ICT in Education in Eritrea is “improving the quality of educational provision by integrating ICT as a tool for teaching and learning as well as for educational management information systems (EMIS) across the education sector”.

The main essence of introducing ICT into the education system is to enhance the quality of education by improving the quality of classroom instruction and student learning. ICT in education is considered as a key contributor to improving the quality of education in Eritrea by engendering life-long learning skills, such as information processing, critical thinking, and problem solving. Moreover, ICT will be utilized to support training and continued professional development of teachers, management and operations staff, and the public at large.

Since its launch in January 2005, the ICT in Education program has made significant achievements in introducing ICT education in schools across the country, thereby ensuring access to ICT education and services among students, teachers and education managers. Some of the major achievements recorded are briefly stated below.

- ◆ 125 schools have access to ICT education and services;
- ◆ 6780 computers have been deployed in these schools;
- ◆ 585 ICT Master Trainers (teachers) and 222 school directors have been trained to implement and manage ICT in schools;
- ◆ One national and six regional ICT training centers have been established and are providing extensive teacher development programs in ICT;
- ◆ A national computer refurbishment center has been established and is providing crucial services of upgrading, maintenance, hardware and software standardization as well as deployment of ICT facilities in schools;
- ◆ A system of e-Waste Management has been established for safe disposal of obsolete IT equipment (hazardous electronic waste). This is intended to ensure a healthy, waste-free and sustainable development of ICT in Education.

The picture below shows a successful technological intervention to bridge the digital divide where students in remote rural schools have access to ICT with the help of solar powered ICT labs.



IV. Higher education

Until recently, there was a single higher education institution in Eritrea, the University of Asmara, which could only accommodate 10 to 15% of high school leavers. Thus, in line to the restructuring and decentralization policy of the Government of the State of

Eritrea (GoSE), seven² Institutions of Higher Education (IHE) have been established in different parts of the country in 2004/05 academic year. Moreover, a National Board of Higher Education (NBHE) has been established.

With the advent of restructuring of higher education in the country, access to higher education has increased and many deserving nationals are pursuing their tertiary level education in various IHE in different parts of the country. The total student population in all IHE has actually shown a 140% increase from 5,000 to 12,000 during the last 5 years. There is also a plan to expand access to higher education through various means including, establishing new public IHE, expanding the infrastructure of the existing ones, opening private IHE, provision of distance education programs, etc.

Currently, the government has been working to strengthen and consolidate the undergraduate programmes which at the moment all IHE offering 48 degree and 42 diploma programmes. Starting from the 2010/11 academic year, however, some colleges have finalized all the necessary preparations to start graduate programmes at Masters level in those departments where the necessary preconditions were fulfilled. The rest of the IHE are also continuously encouraged to commence post graduate programs and are expected to follow suit when necessary arrangements are finalized.

Table 1: Student enrolment in all IHE at Degree and Diploma levels

IHE	STUDENT ENROLMENT		TOTAL ENROLMENT			
	DEGREE	% of Total	DIPLOMA	% of Total	TOTAL	% of Total
EIT	3091	45.4	2699	59.1	5790	50.9
HAC	902	13.3	475	10.4	1377	12.1
ACHS	694	10.2	565	12.4	1259	11.1
CBE	675	9.9	551	12.1	1226	10.8
CASS	690	10.1	84	1.8	774	6.8
COMSAT	451	6.6	190	4.2	641	5.6
OSM & DM	302	4.4	-	-	302	2.7
Total	6805	100	4564	100	11369	100

During the 2010/11 academic year, there were a total of 11369 students enrolled in all IHE. Out of these, 6805 students (60%) were enrolled in degree and the rest 4564 (40%) in diploma programs. The total student population has increased by 25% compared to last academic year.

Female student population in all IHE remains to be low (27.7%) despite the fact that an affirmative action is being taken during placement of female students to degree and diploma programs after taking the Eritrean Secondary Education Certificate Examinations (ESECE). The percentage has shown slight improvement of about 2.4% this year compared to last year.

² Eritrea Institute of Technology and five other colleges, namely, the College of Agriculture, the College of Arts and Social Sciences, the College of Business and Economics, the College of Health Science, the College of Marine Sciences and Technology and the Orotta School of Medicine.

All IHE are making concerted efforts to improve the quality of education through creating the teaching-learning atmosphere, improving teaching facilities, designing appropriate and relevant curricula, providing qualified and dedicated teaching staff, enrolling diligent and conscientious students, and putting in place pertinent guidelines governing academic and administrative matters.

The staff situation in 2010/11 academic year was not different from the previous year. During the 2010/11 academic year, there were a total of 624 academic staff in all IHE, out of which 385 (62%) were nationals and the rest 239 (38%) were international (expatriate) staff. Compared to last year, this year there is an increase of about 14% in the expatriate faculty and this can be explained by the fact that new programs are being opened in some IHE which will definitely require additional staff.

Recruiting international/expatriate faculty staff in IHE in order to fill the gap in teaching requirements is costing the country a substantial amount of foreign currency. The NBHE has, therefore, designed and started implementing an exit strategy through rigorous staff development program within and outside the country, commencing distance education programs to upgrade the level of education of the staff, recruiting qualified nationals working in different ministries and government offices, utilizing the expertise of Eritrean scholars in the Diaspora and fostering cooperation agreements with universities outside the country.

V. Institutional Capacity Building

The education sector possesses limited capacity to deliver educational services at all levels. These limitations cut across all spheres of the educational delivery system right from policy formulation to local educational practices at the school level. Accordingly the MOE recognizes the need to assess the capacity of the sector in policy formulation and analyses, system designing, planning, management, programming, budgeting, and operational issues with the intent of developing and strengthening the institutional capacity of delivering sound education system in the country.

Many capacity building initiatives were taken to accompany such processes, the most important of them being the transformation and the development of the regional education offices that was progressively organized, staffed and equipped. However, the severe resource constraints of the country did not allow to fully develop the institutional capacity needs required by the decentralization of the education sector.

During the course of 2005, the MOE has undertaken capacity assessment of the education sector and closely analyzed and identified critical capacity gaps that may hinder the effective and efficient implementation of the education service delivery.

Based on the assessment sub-sector policies and strategies for TVET and Adult Education have been reviewed and developed. In addition, studies on various sector and sub-sector issues have carried out. Priority areas of institutional capacity building have been identified and the organization framework of MOE reviewed and articulated.

According to the capacity development plan efforts have been made the following staff and skills development programs in various specializations and qualifications have been carried out for MOE staff at all levels:

- ◆ The MOE has trained 149 senior education managers, school directors & supervisors, teacher educators, curriculum developers and other senior education officers through Distance Learning Program which has been conducted in collaboration with the technical University of Kaiserslautern (Germany). Accordingly, they have graduated in Curriculum studies, Educational Planning & administration and Educational supervision & Accreditation respectively in diploma, bachelor and masters degree.
- ◆ Moreover, 58 curriculum developers and teacher educators have been trained through Distance Learning Program which has been conducted in collaboration with Euclid University (USA) and Eritrean Higher Education Institutes and graduated in various areas of studies in diploma, bachelor and masters degree.
- ◆ 99 TVET instructors, 15 librarians, 28 laboratory technicians, 14 guidance and counseling officers have trained in Eritrea Institute of Technology in collaboration with Business and Strategy Europe (Belgium) and graduated in certificate, diploma and bachelor degree.
- ◆ During the last three years, 319 school directors in diploma and another 36 in bachelor degree have graduated in Eritrea Institute of Technology.

Besides, to establish a full-fledged and functional Educational Management Information System (EMIS) a comprehensive assessment has been carried out. As a result, extensive stakeholders' analysis has been carried out and based on the analysis Functional Specification Requirement (FSR) and Technical Specification Requirement (TSR) has been developed. Currently, software development for the Educational Management Information (EMIS) is undergoing.

In addition, in order to enhance the delivery capacity of the Ministry at all levels various educational procedures, rules and regulations have been developed and the working environment was improved through the procurement of furniture and equipment to all levels of the sector.

VI. Financing Education

In terms of financing, basic education is free and compulsory through grade 8. The policy beyond that point has not been defined. There is some intention, as expressed in the *Concept Paper*, for some cost sharing at the tertiary level, but means to implement this policy have not been formulated. Neither has been decided whether to introduce some form of cost sharing in secondary education. Currently, education is free for all at all levels and sub-sectors. However, the establishment of private schools that maintain the standards set by the Ministry of Education is encouraged at all levels of education.

The strategy of the Government for financing needed reforms, improvements and expansion. Therefore, the strategy will include the following:

- ◆ The Government will increase its expenditures on education in line with its commitment to EFA and MDG goals and its ability to raise domestic revenues;
- ◆ The community and direct beneficiaries will be mobilised to contribute towards financing educational costs, exempting those from low-income households;
- ◆ The private sector will be encouraged to invest in the establishment, operation and expansion of schools; and
- ◆ Development partners (DP) will be encouraged to assist in closing the financial gaps.

VII. Conclusion

Despite numerous constraints, the Government of Eritrea has made remarkable achievements in education and training. Nevertheless, there is a long way to go to provide quality primary and secondary education as well as technical and vocational training to all citizens. Similarly, establishing vibrant higher education institutions is a big challenge for countries with limited means like Eritrea. However, since education and training is given top priority by the Government, Eritrea is quite confident that it could meet all these challenges and make big advances in education.