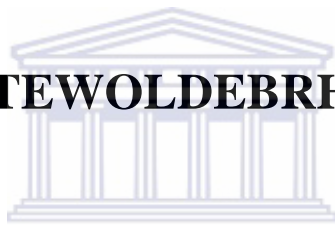


**ETHNO-REGIONAL DISPARITIES IN
PRIMARY SCHOOLING IN ERITREA,
1992-2001**

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UNIVERSITY of the
WESTERN CAPE

**A thesis submitted in fulfilment of the requirements for the degree
of the Doctor of Philosophy in the Faculty of Education,
University of the Western Cape.**

November 2007

Supervisor: Professor A. Fataar

KEY WORDS

ERITREA

PRIMARY EDUCATION

ACCESS

EQUITY

EFFICIENCY

DISPARITIES

REGION

SUB-REGION

ETHNICITY



DECLARATION

I declare *ETHNO-REGIONAL DISPARITIES IN PRIMARY SCHOOLING IN ERITREA*, 1992-2001 is my own work, written under the supervision of Professor A. Fataar. I submit it to the University of the Western Cape for the Degree of Doctor of Philosophy (DPhil). It has not been previously submitted, either in part or whole, for any degree or examination at any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete reference.

Signed: _____

Ephraim Tewoldebrhan Ephraim *of the*
WESTERN CAPE

Date: November 2007

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I dedicate this thesis to my late parents Tewoldebrhan Ephraim Sultan and Tegbaru Tesfazghi Ugub who would have been proud of my achievement. Rebi jennet lahabekum.



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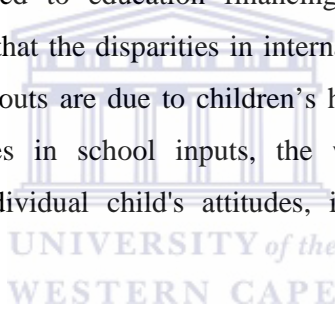
ABSTRACT

Eritreans have been subjected to limited and unequal education provision throughout their hundred years of colonial history. It was expected that in post-independence Eritrea education provision would be equitably provided to all the regions and ethnic groups in the country. Employing document analysis and unstructured in depth interviews with various stakeholders in education this thesis presents an account of the state of primary schooling in Eritrea between 1992 and 2001. The focus of the thesis is on understanding disparities in provision in primary schooling with particular emphasis on ethno-regional disparities and what precipitate these inequalities. The reason for the emphasis on region and ethnicity in analysing schooling provision was because of the country's multi-ethnicity and the over-lapping of regions and ethnic groups.

The thesis employs macro-structural forces (national conditions, state policies, and global forces), family factors (socio-economic status, structure, and resources), school factors (inputs, processes and organisation) and community factors (structure and resources) and the interplay between them as conceptual framework to understand ethno-regional disparities in education and how it evolved over time.

The thesis argues that although the government has done remarkably well in its attempt to address the educational inequalities that it inherited from the country's colonial past, a lot remains to be done and many disparities are still in place. The thesis further argues that ethno-regional disparities in school access in Eritrea are historically located. The thesis points out that political favouritism and deliberate neglect of certain regions and ethnic groups during the colonial periods created educational imbalances. In addition, the thesis discusses the role of state and household level poverty, scattered habitation patterns and low demand and under-utilisation of educational provision by some sections of the society in ethno-regional disparities in education.

With regard to educational inefficiency, the thesis indicates that the system level inefficiencies are related to education financing and language in education policies. It also shows that the disparities in internal inefficiencies as manifested by repetition and drop outs are due to children's home and cultural background deficiencies, differences in school inputs, the way school and society are organised, and the individual child's attitudes, interest, motivation and self-concept.



The thesis concludes that Eritrean primary schooling is regionally, intra-regionally and ethnically inequitable. It reveals that the national educational averages hide regional inequalities which vary substantially. The thesis further concludes that regional educational averages unless broken down further can mask considerable intra-regional disparities in education. With regard to efficiency, the thesis shows that Eritrean primary schooling is inefficient at both the national and regional levels with the lowland regions and schools that use ethnic minority languages being more inefficient, and argues that in multi-ethnic and multi-lingual societies where ethnicity, religion and region coincide, understanding ethno-regional disparities in educational provision is very critical.

November 20007

LIST OF ACRONYMS

BMA: British Military Administration

CRC: Child Rights Convention

ECD: Early Child Development

EFA: Education For All

EPLF: Eritrean Peoples Liberation Front

ESDP: Education Sector Development Programme

GER: Gross Enrolment Ratios

GOE: Government of Eritrea

HDI: Human Development Index

ILO: International Labour Organisation

IMF: International Monetary Fund

IPRSP: Interim Poverty Reduction Strategy Paper

MOE: Ministry of Education

NER: Net Enrolment Ratios

NRS: Northern Red Sea

SRS: Southern Red Sea

UNDP: United Nations Development Programme

UNESCO: United Nations Educational Scientific and Cultural
Organisation

UNICEF: United Nations International Children Education Fund

UPE: Universal Primary Education

WB: World Bank

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Chapter one: Introduction

1.1 General background and rationale for the study

Access to primary education of acceptable quality is an inalienable right of every child. The (1948) Universal Declaration of Human Rights Article 26, states that, everyone has the right to free and compulsory education. Article 28 of the Convention on the Rights of the Child (1990) recognises the right of the child to education and makes primary education compulsory and available to all. Article three of the World Declaration on Education for All (1990), calls for free quality education for all children, youth and adults, and the Dakar Framework for Action (2000) reaffirms these visions.

Despite these declarations and the good intentions of multilateral organisations and states, achievements in access to primary education are far from satisfactory. Primary education in most developing countries has become a moving target. Levin and Lockheed (1993:1) argue that “the goal of providing primary school-age children with access has not been met, and it seems to grow farther from reach as high birth rates stretch national fiscal and organizational capacity to provide more school spaces.” According to the Dakar Framework for Action report (2000:12), some 113 million children, 60 percent of whom are girls, have no access to primary schooling. In Sub-Saharan Africa progress in primary schooling has been hindered and achievement rolled back due to austere economic adjustment programmes, an increased debt burden, poor governance and inadequate and poorly used resources (Dakar framework for Action, 2000:25).

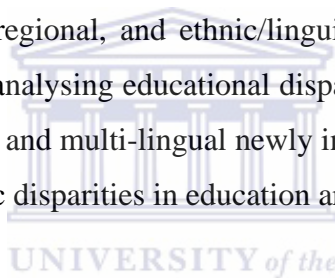
The African Development Bank Education Sector Policy Paper (1999: ii) identified limited and unequal educational opportunity as a major constraining factor, leaving over 50 million children in Africa still not able to attend primary school.

In poor developing countries, states and households are unable to provide the necessary educational inputs and infrastructure that would make increased access a reality (Colclough et al, 2000: 5-27). Regional and gender disparities in education are growing.

Many children are deprived of primary education opportunities. Poor children and children from socio-culturally marginalised and geographically isolated communities are deprived of schooling opportunities and girls and working children are the most disadvantaged (Aggarwal, 2001:4).

Primary school access in Eritrea is limited and unequal in terms of gender, ethnicity and region. The national gross and net enrolment rate for primary school was 56.6 percent and 38.9 percent respectively in 2000/01. The gross enrolment rates for boys and girls for the same period were 61.2 percent and 41.4 percent and the net enrolment rates were 51.5 percent and 36.4 percent respectively.

Educational disparities take different forms and can be examined from different perspectives including; gender, social, regional, and ethnic/linguistic disparities. These dimensions are all equally important in analysing educational disparities in school access and efficiency. However, in multi-ethnic and multi-lingual newly independent developing countries like Eritrea, regional and ethnic disparities in education are very acute.



Eritrea's regions have been drawn along ethnic and religious lines. Because of the impact of colonialism and other historical factors, regions and ethnic groups in the country have comparatively uneven stages of economic and educational development profiles. The implication of this is that some ethnic groups and regions are worse off in terms of access to education compared to other regions and ethnic groups. National educational statistics show great imbalances between the regions in terms of school enrolment. Therefore, a critical understanding of ethno-regional educational disparities is very crucial in a multi-ethnic, multi-lingual and multi-religious nation state. Important to understand in this regard is that in Eritrea the regions overlap with ethnicity, language and religion.

The thesis examines access and efficiency disparities within the Eritrean primary education system with a specific focus on regional and ethno-linguistic disparities in access and efficiency at the primary school level. Eritrea is a newly independent (1991) multi-ethnic and multi-lingual country, with a population evenly divided between

adherents of the Christian and Islamic faiths. It has six administrative regions mostly divided along ethnic and religious lines. During its 100 years of colonial rule the country was deprived of educational opportunities. The meagre educational opportunities under its consecutive forms of colonialism were unevenly distributed between regions, within regions, between urban and rural areas, among the sexes, and religious and ethnic groups.

Eritrea inherited an uneven education system which has had and continues to have a profound impact on the nature and direction of its current education system. Therefore, owing largely to the long war of independence, its variegated colonial legacy and decades of mismanagement, primary school provision is inequitable in distribution, and poor in quality and efficiency. Moreover, the presentation of national and regional averages of rates of educational enrollment, promotion, repetition, and drop out distort regional and intra-regional disparities. The study particularly focuses on disparities in primary schooling provision until grade 5 because:

- primary school is the level which is considered as a basic human and political right of a child, and
- It is the only level that is meant to be widely available to Eritrean children, and the national education policy requires instruction to be given in the child's mother or ethnic language at this level.

By focusing on ethno-regional disparities in access and efficiency in the Eritrean primary school system the thesis provides an analysis of the current state of the Eritrean primary school sector and the factors that affect ethno-regional access and efficiency at primary school level.

The rationale for the focus of the thesis is based on the following: an ethno-regional analysis of education is critical for understanding the causes and effects of regional and ethnically based inequity in school access in the country. Regional and ethnic disparities in the Eritrean education system have not been researched. The extant studies based on nationally focused analyses aggregates, I believe mask real educational inequalities in

Eritrean primary education provision. An ethno-regional focus I believe would shed light on the complexities of the country's primary education provision. It is fundamentally framed on unmasking the true extent of regional disparities, a dimension that is underplayed in nationally based analyses.

My interest in this research focus emanates from the conviction that my research could contribute a small part to the democratisation of educational provision in the country. I am concerned to understand how inequalities within the Eritrean education system can be reduced. My intention is to direct attention to inequalities affecting backward regions and under-privileged ethnic and social groups. I am hoping that my research albeit indirectly, will assist the government of Eritrea in the formulation of more appropriate education and socio-economic policies. I hope to be in a position as an official at the Ministry of Education of Eritrea to offer educational planners a basis for informed policy considerations.

The study could help signal the importance of examining educational disparities from a geographic perspective in addition to the usual dominant socio-economic perspectives that characterise analyses of educational access. An ethno-regional analysis could contribute to a better understanding of those policy processes that result in unfair access for ethnic minorities and regions to public services such as education. It contributes to the promotion of equal opportunities, equitable access and non-discrimination within the public domain.

1.2 Aims of the research

The thesis aims to:

- Understand how educational disparities evolved in Eritrea in the past.
- Discuss the history of educational provision in terms of regions and ethnic groups.
- Interpret the effect of the uneven provision of educational opportunities to the various regions and ethnic or religious groups.

- Understand the measures taken by the state to rectify educational disparities inherited from its colonial past.
- Ascertain what policy instruments the state used to rectify educational disparities.
- Investigate the current inequitable and inefficient state of primary schooling in Eritrea.
- Analyse prevailing regional and intra-regional disparities in primary school access in Eritrea.
- Understand and interpret the causes of regional and intra-regional disparities in primary school access.
- Analyse and interpret ethno-linguistic disparities in primary school access.
- Understand the state of educational inefficiency and wastage in Eritrea, and
- Analyse the extent of, and cause for, primary school inefficiency in Eritrea.

1.3 Main research questions



The thesis responds to the following main research question: What are the ethno-regional disparities in Eritrea's provision of primary schooling? How can these ethno-regional disparities be accounted for in terms of accessibility and efficiency? To answer these two main research questions the thesis responds to the sub-questions mentioned below.

- How did educational disparities evolve in Eritrea?
- What are the effects of previously uneven provision of educational opportunities on the various regions and ethnic or religious groups?
- What measures were taken by the state to rectify the country's inherited educational disparities?
- What policy instruments did the state use to address educational disparities?
- What is the current state of primary schooling in Eritrea?
- What are the regional and intra-regional disparities in primary school?
- What are the causes of regional and intra-regional disparities in primary school access?
- What is the extent of ethno-linguistic disparities in primary school access?

- How inefficient or wasteful is the country's primary school system?
- Why is the Eritrean primary school system inefficient?

1.4 Framework of the research

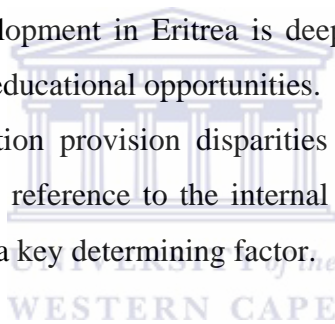
The conceptual framework for the thesis was partially informed by Carron and Chau (1981) and Foster's (1980) work on regional disparities in educational development. I also take into account Aluede (2006) and Kosemani's (1993) work on regional demands and educational disparities, and Buchmann and Hannum's (2001) work on education and stratification in developing countries. The thesis also takes into account the work done by Carron and Chau (1996), Lockheed et al (1989), Fuller and Heyneman (1989), Farrell (1992) on school quality, education achievement, and education and social equality (see chapters 2 and 5).

In analysing regional and ethnic disparities in Eritrean primary schools I employed the region and sub-region as units of analysis. The choice of region as a unit of analysis is based on the fact that demographic, economic, social and educational data is collected by region, thus enabling the 'region' as a viable unit of analysis. A regional focus is able to provide a comparative study from both a historical and political perspective given the country's distinctive regionally based differences. Regions in Eritrea are diverse in terms of their human, physical, linguistic and cultural contexts. The regional approach makes it possible to analyse how each region and language group is fairing in terms of access and efficiency in education. It allows for a disaggregation of the national demographic and educational data, leading to a deeper understanding of educational and other inequalities.

In addition, the thesis's focus on sub-region is intended to examine intra-regional disparity. A regional perspective similar to a national one has the potential to disguise an understanding of access. The sub-regional focus is aimed at understanding educational provision inside regions. It is intended to portray disparities between core and periphery, rural and urban, and rich and backward sub-regions.

In a multi-ethnic country ethnicity is a factor in education provision. Ethnicity is a manifestation of racial, tribal, and cultural groupings sense of common historic origin and destiny, cultural traits and institutions, such as language and family patterns that distinguish one ethnic group from other sections of the national community (Makoloo, 2005: 7-9). Therefore, the focus on ethnicity in primary schooling provision is critical. Many people don't understand that ethnicity is a factor in the Eritrean education. Some policy makers deny that ethnicity is a crucial determining factor in the Eritrean education system, while others see the ethnic issue in education as too sensitive politically, leading them to avoid it altogether. I focus on ethnicity because:

- Eritrea is a multi-ethnic country, making the ethnic factor important in examining educational imbalances.
- The history of educational development in Eritrea is deeply rooted in ethnicity which affects the distribution of educational opportunities.
- Current Eritrean primary education provision disparities cannot be adequately explained or understood without reference to the internal social stratification of the country of which ethnicity is a key determining factor.



1.5 Research design and methodology

The thesis employs document analysis and interviews as its main research design. In addition, in order to understand and analyse the issues of disparity in school provision in general and ethno-regional disparities in education in particular, I conducted an exhaustive literature review in which I identified key readings on educational stratification and disparities, and determinants of primary education outcomes in developing countries, which I subsequently used to inform my understanding of disparities in education. In the literature review that I conducted, I identified a number of primary education outcome determinants and causes for educational disparities which include among others the conditions of parenthood and cultural deprivation, social differences in degrees of educational motivation and social aspiration, differences in cultural capital, organisation of the education system that reflect and reproduce classes

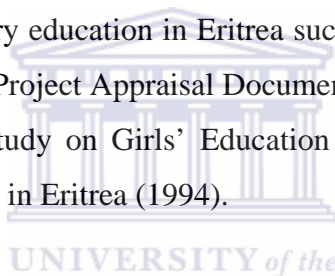
and other division, social biases towards ethnic and religious minorities and girls, hidden curriculum and teacher expectations that result in self-fulfilling prophecy of success of some groups and failure by others, and failure of schools to acknowledge and include certain kinds of cultural identities, especially in respect to ethnicity and gender. These determinants were used as the bases for developing interview guide and the protocol for document analysis.

I analysed the following government policy documents and pronouncements: Macro-Policy (1994), National Economic Policy framework and Programme 1998-2000 (1998), Interim Poverty Reduction Strategy Paper (2001), the Concept Paper for a Rapid Transformation of the Eritrean Education System (2002), the Education Sector Development Programme (2005), National Education Policy (2003), Our People Are Our Future: A framework for the Development of Human Resources in the Education Sector (2001), the Curriculum in Eritrean Schools: Analysis Report (1997), National Education Gender Policy and Strategic Framework for Action (2004), the MLA summary report (2002) and Education For All Country Report (2001). The focus on statistical documents has helped me provide an analysis of national, regional and sub-region educational statistics on primary school enrolment, promotion, repetition and drop out. The documents that I selected for the study were chosen on the basis of their importance to the study. The educational statistics document, for example, was selected because it contains information that comprises general population estimates, school-age population, school enrolment by region and sub-region, enrolment by gender and language of instruction and by level. It also contains information on schools by region and sub-region, urban rural and by ownership. Moreover, it contains information on pupil performance and achievement. The other documents selected for the study consist of critical information regarding policy, curriculum, pupils learning achievement, education transformation and aspects related with access and equity.

The study is primary based on official MOE statistical data collected annually by the statistics unit of the Department of Research and Human Resource Development. The unit annually publishes basic education statistics and essential indicators publication. The

statistical data provides descriptive information related to education that include general population estimates, school-age population by level, enrolment, teachers, schools, participation rates, school location, school ownership by level, schools and language of instruction, repetition and drop out by region, gender and grade and through put. The data is collected at school; sub-region and region levels and normally a 100 percent return rate of the questionnaires are achieved every year. The questionnaires are filled in by school directors, sub-region and regional education heads with the support of education statistics teams. Although it is mainly intended for internal administrative and planning purposes, it also provides relevant educational information to researchers and the general public (Essential Education Indicators 2000/01:6). It is therefore available in the public domain.

In addition, the document analysis involves Inter-governmental research, field reports and other existing research reports on primary education in Eritrea such as the World Bank's Education Sector Improvement Project, Project Appraisal Document (2003), the UNICEF Mission Report (1997), the UNICEF study on Girls' Education in Eritrea (1996) and UNICEF report on Children and Women in Eritrea (1994).



A careful analysis of the documents was used to process and understand the substantive policy underpinnings of governmental efforts in schooling provision. The documents provided information on issues that couldn't be readily addressed through other methods (Bryman, 1989). Document analysis is an important mechanism for checking the validity of information derived from other methods, such as interviews. It can be used to provide additional data and to check on findings derived from other sources of data (Bryman, 1989). Analyses of the documents provided me lenses through which I attempted to understand the gap between official policies and practice (Bryman, 1989).

Issues emanating from the documents helped me generate ideas for questions that I could pursue through observations and interviewing (Deyes, 1999). A major advantage of document analysis is that documents are generated contemporaneously with the events that they refer to; therefore, they are less likely to be subject to memory decay or memory distortion compared with data obtained from an interview (Deyes, 1999).

Document analysis is relatively more affordable than other forms of research and data collection methods (De Vos et al., 2002). Documents are non-reactive, and therefore, the contents of the document are not affected by the behaviour of the researcher. De Vos et. al (2002) argue that document analysis circumvents the problem of inaccessible subjects, as the researcher need not make personal contact with the respondents.

Document analysis like other research methods has its disadvantages. It may be subject to 'selective-deposit' or 'selective-survival bias' (Deyes, 1999). Furthermore, researchers may be influenced by the biased opinion of the authors who produced the documents. Therefore, I agree with Whitman (2000) that document analysis should be conducted by individuals who understand the purpose and content of the documents, because inadequate knowledge of the domain may result in errors within the research report.

Interviews were the second main research method. I used the interview method mainly to obtain further clarifications and to fill gaps in the documents. Using an unstructured interview format, I interviewed three MoE national education officials, two from the department of general education who are involved in curriculum planning and development, and one from the Department of Research and Human Resources Development. I also interviewed three regional education officers, (Anseba, Northern Red Sea and Maekel). I also had informal interviews with a number of teachers and parents.

Interviews as a type of research method help discover detailed answers to complex questions in a face-to-face situation. Interviews can be used to fill gaps, clarify points and grasp feelings and emotions that cannot be understood from documents. Particularly, unstructured interviews can give greater insight and an in-depth understanding of the topic researched, but they need considerable interviewing skills and the transcribing is time consuming.

The selection of the six MoE officials was purposive. I selected the six MoE officials because they were critical in supplying information that fill the gaps identified in the documents by clarifying points and in grasping feelings and emotions that cannot be understood from the documents. For instance, interviewee number one from the Curriculum Development Division is head of the Basic Education Unit which is the main focus of the study. In addition, he has wide-ranging experience as a teacher, teacher trainer and curriculum developer for many years. Therefore, he was the right person to answer questions related to primary school curriculum relevance, quality and availability of textbooks, receptivity of mother tongue education by parents and pupils and the quality and quantity of teachers at primary school level. Moreover, ~~he was~~ in a position to respond to questions related to issues that deal with ethno-regional disparities in education as he is from a non-dominant ethnic group and a Muslim himself.

Interviewee number two from the same division is a respected scholar with a doctorate in education and far-reaching experience in Eritrean education. He is working as a consultant in the Curriculum Division since independence and has conducted various researches related to quality of education, learning achievement, and educational transformation. Moreover, as an outsider to the MoE he is the right person to supply unbiased and non-partisan information.

Interviewee number three is head of the Research and Statistics Division in the MoE, a division that produces basic educational statistical documents on which my research basically depends. He was in a position to answer questions related to the number of schools, school location, school ownership, school-age population by level, participation rates, language of instruction, repetition and drop out by region etc. He is an experienced veteran of the armed struggle with long experience as a teacher, school director, and regional education officer before being promoted to head the research and Statistics Division.

The remaining three interviewees were heads of regional education offices of Anseba, Northern Red Sea and Maekel regions. I purposely selected these three educational

officers to represent the six regions. Anseba and Northern Red Sea regions are in the western and eastern lowlands respectively and Maekel is in the central highlands. Moreover, Anseba and Northern Red Sea Regions are the ones which I selected for intra-regional educational disparity analysis. The choice of Maekel is to juxtapose educational provision in core and peripheral regions and between sedentary and nomadic populations. In addition, the three regional education officers are highly experienced individuals who worked as regional education officers for a long time and in various regions. These individuals are critical in supplying information related to education disparities within sub regions, ethnic and religious groups and between the sexes.

In addition to these purposively selected highly placed education officers, I conducted informal interviews with parents and teachers. They were mainly friends, relatives, coworkers, neighbours and teachers who teach in schools where my children go. In Eritrea, because of the prevalence of a culture of silence which is the legacy of colonialism people are not willing to talk to strangers on issues that have to do with the government, thus, one has to elicit information in an informal way. The views of teachers and parents were very significant for my study because they have a personal and social interest in education as parents and tax payers.

The core issues that I raised in the informal interviews with parents and teachers were related to accessibility and quality of education. For example, I raised issues such as availability of textbooks, pupils' educational achievement, pedagogical leadership by school directors, and teacher satisfaction in terms of remuneration, management, and professional upgrading. Moreover, I asked questions that have to do with cost of schooling, language of education, distance of schools, and availability of places for all children within the schools. In addition, the interviews attempted to answer research sub-questions that ask about the evolving of educational disparities in Eritrea, the effect of previously uneven provision of educational opportunities on the various regions and ethnic or religious groups and the inefficiency and wastefulness of the country's primary school system.

In conducting the informal interviews, I tried to be as informal as possible in the beginning by asking very general questions to break the silence and to encourage the interviewees to speak. Then, I gradually moved into more specific questions. I was also purposely asking questions to check the veracity of statements made by some respondents. As I am aware of the dangers of getting unknowingly involved and providing personal opinion, I tried not to get drawn into the discussion as much as possible. Moreover, I tried as much as possible to make the conversations a real give and take.

In analysing the data collected through the unstructured and informal interviews, first of all, I went through all the material to familiarize myself with the responses, and then identified the major categories and themes. I also located the themes within the text and extracted meaning from the text with reference to the thematic code. In analysing the documents I used region, sub-region, gender, and language/ ethnicity as categories of analysis.

In addition to document analysis and interviews which I elaborated above, I made use of my own experience in researching the study. In research, who you are, is very important. The self of the researcher is an important ingredient in addressing issues such as the choice of the research topic, theories, methods, research questions, data collection, results and interpretation. In researching this thesis, I made use of my own personal expertise and experience to generate unique, relevant workplace based knowledge. In doing the research, I drew on my extensive and rich experience as a teacher, teacher trainer, curriculum developer and researcher in the Ministry of Education. Moreover, my political inclination and ethnic background is a great asset in furnishing me with the needed competencies and skills to carry out ethno-regional disparities in education in Eritrea. Similarly, as an educational researcher working in the Ministry of Education Research and Statistics Division which is responsible for generating the educational statistical data, I realised that the educational statistical data raises more questions than it answers and at times can disguise the existing primary schooling situation. In analysing the educational statistical documents, I realised that it is merely descriptive and they fail to answer why

situations are as they are. This relevant, workplace based knowledge generated the curiosity for analysing the data from a regional and ethnic perspective so as to understand the state of primary schooling in the country.

1.6 Structure of the study

The thesis is made up of seven chapters. The chapters are divided into conceptual, historical and analytical chapters. Chapter one is an introduction to the thesis. It starts with introducing the academic and strategic aims of the thesis, the rationale and background for the study, the context, motivation and importance of the study and the main research questions that the thesis has to respond to. In addition, the chapter provides the framework of the research and the unit of analysis to be employed plus the research design and methodology.

Chapter two is a literature review and conceptual chapter. It highlights and informs the issue of educational disparities and stratification. It provides the conceptual framework for the thesis. This chapter covers the general area of basic education and then narrows the focus to universal primary education. It looks into the issues of quality versus quantity in basic education provision. It argues that improvement of quality has to be addressed with the same sense of urgency as increasing access. The main thrust of the chapter is to enable an analysis of educational disparities, with particular focus on ethno-regional disparities in education. Chapter two maintains that ethno-regional disparities have historical roots such as colonialism and missionary activities, political causes such as a regime in power favouring a particular ethnic or religious group, or may be instigated by demographic and global factors. The chapter underscores the fact that ethno-regional disparities can be the outcome of demand and supply, relative to the nature of a country's geography. It argues that some regions and ethnic groups take advantage of their proximity to the capital city, the port, commercial and trade routes, and have a head start in education in comparison with others.

Chapter three is a historical chapter. It focuses on the history of educational provision in Eritrea during the colonial period. It examines educational dispensation in terms of regions, urban rural, the sexes and religious groups. The purpose of this chapter is to understand the role played by missionary and colonial activities in the area of schooling and to examine to what extent the prevailing situation of ethno-regional disparities in primary schooling is influenced by it. Chapter three emphasises the view that Eritrean educational disparities have historical roots that it continued to have an impact on educational provision.

Chapter four provides a link between Eritrea's educational history and educational present. It explores how the government of the state of Eritrea addressed its inequitable educational inheritance. It discusses the MOE attempts to resolve disparities and improve the quality of schooling provision. The chapter argues that despite the MOE's commendable efforts ethno-regional educational disparities are still in place.

Chapter five is an analytical chapter based on statistical data on educational provision. It examines primary school access in Eritrea by region, sub-region, gender and ethnicity. The main argument of this chapter is that a macro-national diagnosis, national aggregates and national averages re mask the realities of primary education provision in the country. Shifting the focus to region and sub-region, I show that Eritrean primary school provision is regionally, ethno-linguistically and in terms of gender inequitable. Chapter five argues that regional disparities coincide with ethnic disparities in the country. To show how aggregates and averages can distort reality even at region level, the chapter also examines intra-regional level disparities in the Anseba and Northern Red Sea regions. I chose to focus on these two regions because of their ethnic heterogeneity.

Chapter six is another analytical chapter. It examines the efficiency of the Eritrean primary school system by region and by gender. It shows how wasteful the education system is by looking into school pupil ratios, teacher pupil ratios, time-on-task and school construction cost. The main focus of the chapter is on the internal inefficiency of the system. The chapter analyses repetition rates, dropout rates and survival rates by region,

by gender and by grade to show that there are regional disparities in primary school efficiency.

Chapter seven is the concluding chapter. It pulls together the whole thesis and draws the conclusion that Eritrean primary school provision is neither regionally nor intra-regionally accessible nor efficient. It also concludes that the primary school system is ethnically inequitable and inefficient. It suggests that the ethno-regional disparities in primary school access and the inefficiency of the primary school system are due to a combination of historically located uneven schooling provision, the current inequitable provision by the state on the one hand, low demand of schooling, and the under-utilisation of schooling opportunities by some sections of the society on the other. The chapter concludes with recommendations to address ethno-regional disparities in Eritrean primary school provision.



Chapter Two: Conceptualizing ethno-regional disparities in educational access

2.1. Introduction

Article 26 of the 1948 UN Universal Declaration of Human Rights states that everyone has the right to education and that education shall be free and compulsory. This declaration aims at giving all children an equal start in life regardless of gender, socio-economic background or geographical location. Despite these and other declarations, good intentions, and heavy investment in education at various levels by developing countries, education in these countries is characterised by declining enrolments and regional and gender disparities.

Primary schooling has been formally accepted as a human right for almost half a century, and since the 1950s a massive school expansion has occurred worldwide. In Sub-Saharan Africa in particular, despite the many obstacles and exceptionally harsh conditions, tremendous efforts have been made to increase access. However, millions of children still remain outside the formal school system and many pupils are not well served by their schools. In developing countries considerable inequalities exist, which take different forms. In some countries it is between male and female, different geographical regions and between different ethnic groups. In others it is between different religious and language groups, while in others, it is between urban and rural areas and between groups of different income levels. No matter what the form of the disparities is, those who miss out are the poor, street and working children, rural and remote populations, nomads and migrant workers, indigenous peoples, ethnic, racial and linguistic minorities, refugees, those displaced by war, and people under occupation.

In this chapter, I review the relevant literature that deals with issues of ethno-regional inequality in educational access with a particular focus on the primary school level in less

developed countries. I first discuss basic education for all, universal primary education and quality and quantity in education and how these impact equitable access. Secondly, I focus on ethno-regional, racial and linguistic disparities in educational access. Thirdly, as regional disparities in education are determined by historical, ethnic, political, societal, demographic and economic factors, the chapter also explores how these issues affect access. Finally, the chapter discusses the impact of parents' education levels and school attributes on ethno-regional disparities in education. The chapter is intended to provide a conceptual framework for the analysis that follows in the rest of the thesis.

2.2. Education For All: an overview

Since the 1990s countries have shown greater commitment to access to EFA, as a result of which primary school enrolment rates have been increasing steadily. According to UNESCO's 2002 EFA monitoring report, 50 countries have achieved their EFA enrollment goals. However, the report also warns that "almost one-third of the world's population live in countries where achieving the EFA goals will remain a dream; unless a strong concerted effort is made" (UNESCO 2002). Nevertheless, there has been real progress in reductions in inequities in the area of gender and ethnic minorities in post colonial African countries.

When many African countries gained their political independence during the 1950s and the 1960s, they embarked upon economic and educational development. Graham-Brown (1991) pointed out that the hope was that educational development would bring about a skilled workforce that can contribute to economic development, strengthen national unity and social cohesion, and boost popular participation in politics. However, the inherited colonial structure, poor institutional capacity, natural disasters, poor governance, and unfavourable terms of trade, among others, have diminished high expectations in post independence Africa.

The period from the 1950s to the 1960s saw an unprecedented expansion of educational systems and educational provision. Watson observed that “(i)n the two decades between 1950 and 1970 primary enrolment rose from 64.7 million to 201.4 million (+ 201%) and from 1960 to 1980, the world’s total enrolments almost doubled, from 327 million to 641 million” (Watson, 1988:141). This was because education was seen as the basis for all other development plans. As pointed out by Watson (1988), in the 1950s and 1960s educational development was considered as key to economic growth, as a crucial factor in the development process, a basic human need, and a producer of trained human resources.

During this period it was believed that education would bring greater equality of opportunity, and equality of incomes, and fairer distribution of power. Education was also viewed as a means of inculcating new attitudes and values (Watson 1988). Thus, the initial focus of most postcolonial political leaders was on the expansion of formal schooling and a move towards UPE (Watson, 1988). This rapid expansion, as argued by UNESCO and the World Bank (cited in Watson, 1988), manifested a number of problems, for example, inequity of provision, systemic inefficiency, high dropout rates and increases in the costs of education. During the 1970s the emphasis switched from quantitative expansion towards quality, relevance, and equitable provision.

However, education provision in Third World countries was drastically affected by the financial crises and economic recession of the 1980s. According to Graham-Brown (1991), in the 1980s the growth in education had slowed down and even reversed, enrolments did not keep up with population growth, and educational expenditure became static or started to fall. As a result, access to education for the poorest group declined and educational quality deteriorated at all levels. This financial crisis and economic recession resulted in educational inequalities between social classes and ethnic and religious groups, and between boys and girls. Graham-Brown (1991) maintains that the effects of the crisis have been most severe among marginal communities such as those who have least access to political power, economic influence and social benefits. Arguing along the same lines Ilon (1994:93-104) observed that due to a globalisation-

induced economic recession, developing countries have been unable to continue providing full access to schooling, causing the educational growth of the 60s and 70s to reverse.

In the 1990s the World Bank, inter-governmental organisations and NGOs began to refocus on Universal Primary Education (UPE), the quality of basic education, and the eradication of disparities. As a result, developing countries had unprecedented increases in enrolments and extended access to previously underserved areas. EFA became the rallying cry for countries, inter-governmental institutions and NGOs.

At the Jomtien conference in 1990 countries, inter-governmental organisations and NGOs entered into agreements to improve enrolment and participation for basic education at all levels of education, and to reduce inequalities in the area of gender, disability and ethnic minorities. The Jomtien vision included universal access to learning as well as a focus on equity and learning outcomes (Dakar Framework for Action, 2000:12). Article 3 of the World Declaration on Education for All (1990) states that quality basic education services should be expanded and disparities reduced, all children must be given the opportunity to achieve and maintain an acceptable level of learning, and underserved groups should not suffer any discrimination in access to learning opportunities.

Despite the pledges of governments, inter-governmental institutions and NGOs towards EFA, progress has been uneven and slow. For instance, the 2000 EFA assessment shows that 113 million children worldwide 60 % of whom are girls, have no access to primary schooling (Dakar Framework for Action, 2000:12). Many governments have focused their efforts on those easy to reach while neglecting those excluded from basic education, whether for social, economic or geographic reasons. According to Dall (cited in Cummings and Dall, 1995:16), modern education systems are biased in favour of certain privileged groups while marginalising ethnic, racial and linguistic minorities, rural and remote populations and nomads and migrant workers. The causes for these failures are many and varied but the major ones are inadequate resources, ethnic rivalry, linguistic differences, inhospitable geographies and lax government political commitments

(Cummings and Dall, 1995:89). In the next section of the chapter I discuss UPE which is regarded as the main delivery vehicle for basic education.

2.3. Universal Primary Education (UPE)

During the last fifty years UPE has become a priority throughout the world. The United Nations Universal Declaration of Human Rights, which was adopted in 1948, declared that everyone has a right to education and called for compulsory primary education. The Convention on the Rights of the Child (CRC) adopted in 1990 by the United Nations endorsed every child's right to education and obliged states to put this right into effect. At the 1990 World Conference on Education for All (WCEFA) delegates from 155 governments reaffirmed the earlier established pledge to education as a human right and recognised the responsibility of their governments to give access to basic education for all citizens. The Dakar framework for action (2000) reiterated the right of all children to education while attempting to oblige countries to commit themselves to UPE.

As stated in Cummings and Dall (1995:26), UPE requires countries to increase enrolment and completion rates, reduce gender disparities in enrolment and completion, and increase the proportion of enrolled students achieving acceptable levels of learning. To achieve these goals it is regarded as important that countries revitalise their primary school networks, target those groups that are hard to reach by using diversified approaches, emphasise learning achievement, and enhance national and local capacity (Cummings and Dall, 1995:26-28). This is an undertaking that requires an enormous effort and commitment of resources.

The argument for UPE was based on the assumption that it would bring about equity of opportunity and social justice and end regional disparities (Watson, 1988:142). However, UPE in developing countries is adversely impacted by fragility of demand among the deprived groups in society (Ahmed and Carron, 1989), and by the socio-economic status of households (Burney and Irfan, 1991). The International Child Labour programme report (2006) shows that schools are not usually available to all children and the quality

of education is frequently poor. Attaining UPE depends on increasing enrolment and completion rates and achieving acceptable levels of learning which imply increasing quantity of educational provision and improved educational quality. I go on next to discuss quality and quantity in primary schooling provision and their manifestation in regional context.

2.3.1. Quality versus quantity in primary schooling

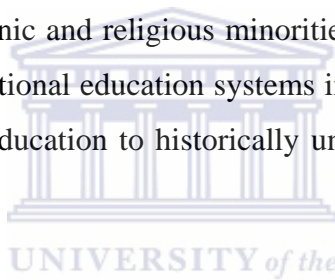
Reconciling quantity with quality is a dilemma faced by all national education systems. Rapid expansion without regard for ensuring an acceptable educational quality results in wasted educational investment. Experience and education research show that once a child is 'pushed out' of a poor quality educational institution, it is difficult to convince the pupil to re-enter the education system. Ankoma et al (2005:7) elaborate on the above by stating that expanding access alone would be insufficient to contribute fully to the development of the individual and society. On the other hand, going after quality at the cost of access could become inequitable because many children would remain outside school. The need to balance quantity and quality in school provision remains a key challenge.

The 2000 Dakar Framework for Action, for example, affirmed that quality was a fundamental determinant of enrolment, retention and achievement. Fuller (1991:5) supports the need to find a balance between the contradictory demands of providing access versus improving school quality. Fataar (1997:344) extends this argument by saying that in the restraining financial environment of the Third World it is important to conceptualise expanding access in a way that will contribute to a quality education system. The important question here is whether financially constrained governments should focus on quantity by increasing the number of schools, or whether the focus should be on improving the quality of the already existing schools.

Poor developing countries must consider school quantity as well as school quality as there is often a significant portion of the school-age population who is not served by the

educational system. However, they must consider the cost-effectiveness of investments that improve school quality relative to investments that expand the school network, especially given the extremely limited resources available.

In low income developing countries the overall quality of education is poor because educational materials are in short supply, the quality of textbooks is deficient, teachers are un-trained or ill trained, and management is inferior. Within the low income developing countries the most affected areas and sections of the population are remote rural areas, minorities, girls and the poor. This poor quality education provided to the poor and minorities affects demand for schooling by these sections of the population and increases the disparities gap between regions and ethnic groups. Moreover, quality is affected by misallocation of expenditure. Those who frequently miss out during allocation of resources are the poor, ethnic and religious minorities, women, and people who live in remote rural areas. Many national education systems in developing countries have not been able to provide quality education to historically underserved populations and regions.



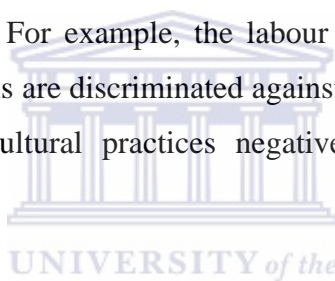
With respect to quantity, despite the enormous primary education expansion in developing countries, there are still large sections of the school-age population not served by educational systems. Therefore, quantitative expansion of primary schooling for those previously excluded is of primary importance. However, high population growth, sparse population density, the rise of educational costs, and the prevailing economic recession in many developing countries slowed the pace of enrolment growth. The prevalence of HIV and aids and other diseases also hampered educational quantitative expansion.

Quantitative expansion of schooling is influenced by both supply and demand side factors which interact and reinforce each other in determining access. On the supply side, state and household level poverty adversely affects school access. Poor states cannot afford to provide sufficient school places for all eligible school-age children. Therefore, many children are denied access. Poor states do not provide quality schooling for their citizens and as a result demand for schooling is low, leading to low enrolment. Colclough et al

(2000:6) argue that in most developing countries quantitative expansion is affected by schools not being sufficiently close at hand and by being of such poor quality that parents do not wish to use them.

On the demand side, poor households cannot afford the high direct and indirect cost of schooling, and therefore, they do not send their children to school in the first place or withdraw them prematurely. Moreover, as parents require their children's labour at home and outside the home, many children are withheld from schooling. Children who do not attend school are overwhelmingly from poor households and the majority of non-attendees are girls, minorities' children, and children in remote rural areas.

Similarly, cultural practices in the household, the school, the labour market and society negatively impact educational demand. For example, the labour market favours males over females. At the household level girls are discriminated against, and most schools are not female friendly. These adverse cultural practices negatively affect educational demand and school access.



In sum, although developing countries have provided primary education to the great majority of urban children and youth, they have not been able to provide education to the same extent in historically underserved populations and regions. In the next section I discuss ethno-regional disparities in schooling.

2.4. Ethno-regional disparities in education

Inequality is a multidimensional phenomenon. There are inequalities between urban and rural areas, between regions, and between different population groups among others. Inequalities arise from differences in income and assets, differences in access to social institutions such as education, differences in social legitimation and social status, and differences in political participation (Justino and Acharya, 2003:1). The E-nine countries¹

¹ E-9 countries are the most populated countries in the world with more than 50% of the world's population and comprise Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan.

in their summit in Delhi in 1993 observed that educational disparities can be situational, economic, social, or cultural in origin. Harrington cited in Huret (2006) observe that:

The real explanation of why some sections of the people are where they are is that they made the mistake of being born to the wrong parents, in the wrong section of the country or in the wrong racial or ethnic group. Once that mistake has been made, they could have been paragons of will and morality, but most of them would never even have had a chance to get out of the system (Harrington 1993, cited in Huret, 2006: 1).

Disparity is situational if it is the result of the difficulty national systems have of reaching and serving far flung rural or nomadic populations, or if it is due to the challenges of conducting schools in urban slums or shanty towns. Similarly, as the rate of participation is generally low among children of linguistic, cultural or ethnic minorities it can be said that disparities in education have social and cultural dimensions.

In addition, economic factors play an important role in accounting for disparities. According to the summit findings of the E-nine countries in Delhi, children from poor families are more likely to work and less likely to attend school than those from better-off families (E-9 summit report, 1993:26). Moreover, the educational provision made in poor areas is often very inferior to that offered in more prosperous communities. Hence, it is neither attractive nor relevant to the children of the poor. Likewise, inequalities arise due to the existence of unequal distribution systems in society. They arise because different individuals and groups face different opportunities and choices. Moreover, inequalities also arise due to historical processes. Aggarwal (2001: 3) asserts that many forms of discrimination in education are related to a historically evolved social ethos and cultural factors and often are the outcome of distortions in the provision or the low quality of educational facilities and associated resources.

In developing countries inequality largely arises from political connections, from a colonial legacy, and from other forms of discrimination (Justino, Litchfield and Whitehead, 2003). In many developing countries unjust distribution of opportunities and

services are due to the existence of weak governments, the influence of political and economic elites and the effect of rampant corruption (Justino, 2003:12).

Moreover, in many developing countries exclusion and poverty are sometimes due to explicit discrimination against specific racial, ethnic and religious groups, and at other times they are the result of self-fulfilling beliefs. According to Bourdieu (cited in Justino and Acharya 2003:21) some lower classes internalize the view that that they will not be able to climb the social ladder. They assume behaviours that will keep them at the bottom of the distribution chain and help perpetuate inequalities. Inequalities are also caused by the influence of more assertive interest groups, as they strive to protect their interest at the cost of the rest of the population.

Regional disparity in education exists in every country, whether developed or developing. It mirrors the inherent inequalities within societies. The variation, however, is greater in developing countries and is compounded by the fact that geographical and regional inequalities coincide with ethnic and religious divisions. An education system can be said to be ethnically biased if one ethnic group has disproportionate or exclusive access to education, if structural arrangements favour the interest of that particular ethnic group, and if the distribution of educational resources is skewed in favour of that ethnic group.

Access to education in peripheral regions has been consistently neglected for various reasons. People living in peripheral regions are often caught up in the vicious cycle of having no access to education and other services. Educational stratification research shows that growing up in a peripheral region often means growing up without education. There is evidently a lack of political interest in the marginal regions. For example, during the colonial era those regions that were not suited for commercial agriculture and mining, and were not located near the centre of colonial commerce, and were unsuitable for European settlements were devoid of development in general and educational investment in particular.

In many countries this trend of favouring the core regions still persists after the demise of colonialism. Many governments in developing countries either lack the political will or the capacity to meet the educational needs of the huge numbers of people who remain outside the core regions or urban centers. Moreover, because of a strong urban bias on the part of politicians and policy-makers, there is indifference towards people from the peripheral regions. Therefore, people in peripheral regions who often have no political voice usually lose out when there is competition for limited resources. In the next section, I will discuss the major contributing attributes of ethno-regional disparities in education.

2.5. Attributes of ethno regional disparities in education

The question of equity in education focuses on whether educational benefits are equally distributed among regions, and whether males and females, and different social, economic or ethnic groups have equal access to educational facilities (Psacharopoulos and Woodhall, 1985:244). Gender and ethnic disparities are prominent in discussions of educational equity. The discourses on regional educational disparity surfaced during the 1970s.

Regional disparities in education, as stated earlier, are caused by a number of factors, namely, historical, ethnic, political, economic, cultural, demographic, and parental education level and attributes. There are also supply- and demand-related constraints that determine regional educational disparities. In the next section of the chapter, I explore regional disparities in education by focusing on some of the above stated factors.

2.5.1. Historical factors and ethno-regional disparities in education

Historically, the main providers of Western education in developing countries were the colonial governments and Christian missionaries. During the colonial periods access to education was limited and there were differences in access and participation within colonial territories, between urban and rural populations, males and females, and

members of different ethnic or religious groups (World Bank, 1988:12). The causes for these disparities according to the World Bank (1988:12) were:

- differential treatment of different African peoples by colonial administrators,
- cost difference of providing education to urban and rural areas,
- difference in responsiveness to educational opportunities by the different population groups, and
- patrilineal customs that prefer education of sons than of daughters.

Therefore, as argued by Kosemani (1993), in order to understand the process and extent of educational diffusion by region it is vital to refer to much earlier processes of educational provision. Many observers suggest that ethno-regional disparities in education stem from the manner in which a society was constructed over years of its history. The reasons as to why many children remain out of school in developing countries are found in the individual historical, political, social and economic circumstances of different nations (Colclough 1994). Thus, it is impossible to comprehend current-day educational disparities without relating them to past educational provisions.

Understanding existing disparities and limitations in a country requires an examination of the dynamics of previous attempts at educational development (Foster 1980:26). Aluede (2004) argues that the history of educational development explains the causes for educational disparity in a particular region or among a particular ethnic group. Blakemore and Cooksey (1980:30) further extend this argument by indicating that colonialism and the advent of missionaries have affected access, equity, and efficiency in education, because missionary educational activities were mostly geographically limited, particularly in coastal areas and among animist population groups.

Colonialism was the second historical factor that created inadequate and uneven provision of schooling in many developing countries. Colonialism created states with ethnic pluralities and linguistic complexities (Watson, 2007:254). These legacies of

ethnic plurality, linguistic complexity, and formal schooling systems which favoured particular ethnic groups led to educational disparities which resulted in other horizontal inequalities, such as income, employment and political inequalities.

Many observers point out that while some educational disparities were the result of deliberate colonial policy others were the result of mere coincidence of geography. Foster (1980) maintains that in countries that experienced colonisation, educational disparities were the result of proximity to the coast, conducive climatic conditions for European settlement, and the presence of commercial plantations or mines. Similarly, receptivity of, and hostility towards, Western education by local rulers were causes of educational disparities.

Many observers assert that in many formerly colonized countries colonialism was the basis of educational inequality. Equally, the economic and political institutions that emerged after independence contributed to the perpetuation of that inequality. Iba Der Thiam (1990:503-511) extends this assertion by indicating that education under colonisation was dispensed to the indigenous population in small doses and selectively. Moreover, Rowmire (1992:227-239) further argued that colonial education was a major source of economic inequality and social stratification which led to disparities in access to education. According to him, a handful of Africans had access to education during the colonial period which they used to exploit and dominate other Africans, and as a result, he argued, those tribal, ethnic, or regional groupings, which were denied education, increasingly became economically and socially disadvantaged.

2.5.2 Global economic factors and ethno-regional disparities in education

Economic recession, the debt crisis of the 1980s, structural adjustment, and declining foreign aid were some of the major global factors that affected educational provision in developing countries (Buchmann 1999:503-516). The economic recession of the 1980s affected developing countries severely as the price of their raw materials fell in the world market. Their revenues to fund educational expansion were drastically reduced. Quality

of existing schools started to decline. Limited spending by the state and the reduced household level investment on education led to limited access, inequitable provision, and poor quality education provision in developing countries. Governments passed the costs of maintaining educational infrastructure on to parents and local communities, leading to educational disparities between rich and poor families, and core and periphery regions. Children of families living in conditions of poverty, socio-cultural marginalization, and geographic isolation were the most affected by deterioration in school provision.

Declining foreign aid was an additional economic global factor that negatively affected education provision in developing countries. Countries had fewer resources to devote to financing schools, training teachers, or subsidizing the costs of educational supplies for poor families (Buchmann 1999). The poor financial structure of developing countries led to insufficient supply, declining school quality, and increased educational costs for households (Colclough and Lewin (1993). Colclough and Lewin (1993) state that increased cost of education mostly affects girls, minorities, urban slum dwellers and those living in remote rural areas. This is because when the cost of education is high it is difficult to persuade poor parents in developing countries that education is a sound investment.

Global factors and influences such as illustrated in the policies and preferences of international organisations have a direct influence on education and stratification process within developing countries (Buchmann and Hannum, 2001:81). Moreover, pressures from the IMF and donor agencies on indebted governments to privatise and decentralise their education systems led to greater inequalities and declining educational participation (Arnove, 1997 cited in Buchmann and Hannum, 2001:82). Educational opportunities in developing countries have thus been constrained by structural inequalities in the global economy.

2.5.3 Local factors and ethno-regional disparities in education

Local level cultural and traditional factors play formative roles in influencing supply and demand of education. Local level factors such as religion, economic status, school distance, and the language of instruction influence both demand and supply and the efficiency of provision. For example, physical accessibility of a school in a locality, availability of enough places in the school for all children, and proximity of the school to the child's home greatly influence access (Buchmann 1999:503-516). Vanzanten (2005:158) observes that location is very important because even if there is good public transportation or parents can drive their children to school, they generally prefer children to go to school near home, to be able to oversee their friends and activities.

Access of provision in general, and girls' education in particular is affected by the local community's culture and tradition, local level socio-economic status, and local level perception of education. Colclough et al (2000:5-27) indicate that because of tradition, regional poverty and community's perception, girls are less likely to attend school, their stay in school is shorter, and they have lower achievement levels.

Additional local level factors that affect access and quality of educational provision are settlement patterns and the ethnic and linguistic diversity of the population. The choice of media of instruction is difficult to negotiate when a community is ethnically and linguistically diverse. Using all the ethnic languages may not be financially feasible, or there may be problems of finding educated people to teach in all the languages. Teaching in the dominant language creates issues of unfairness, as children from minority languages will be at a disadvantage. Settlement patterns also hinder access to schooling as those who live far from where the school is situated may be affected by distance. Again, nomadic children who move from place to place with their parents in search of grass and water for their livestock are at a disadvantage as most schools are fixed site based. Thus, local culture and tradition, population settlement pattern and linguistic diversity, economy, and perception towards schooling greatly determine the extent of school accessibility.

2.5.4 Family factors and ethno-regional disparities in education

Family level factors shape the extent of access and the quality of educational provision in developing countries. Ethnic minority parents usually have little education or no education at all and are by and large poor. These parental characteristics and socio-economic status of households influence enrolment differentials (Burney and Irfan 1991). According to Buchmann (1999:503-516) and Colclough et al (2000:5-27), household level poverty, parental literacy, negative parental attitudes to schooling and parental expectations influence educational access.

Parents' education levels influence student's schooling access and contribute to intergenerational mobility of households. Bourguignon et al (2003) assert that parental education levels have a strong influence on inequalities in the early years of schooling. They stress that the level of parents' education is the major determinant of an individual's school attainment. According to Justino (2003:16), inequalities arise when people face different opportunities which are often determined by family relations and surrounding social environments. For instance, different generations of the same family are apt to continue in the same social and economic level which suggests that inequalities will be decided to a large degree by family connections (Justino, 2003:17).

The most important family background characteristic is income. A child's inheritance or parent's income is a major cause of inequality and has the ability to perpetuate and intensify inequality (Wedgwood 1928 in Huret, 2006:1). Furthermore, inequalities can intensify across generations because of difference in family connections, larger initial wealth and the fact that children from better-off families attend quality schools (Justino and Acharya 2003:19).

Colclough et al (2000: 6) contend that parental perceptions of the benefits of schooling influence whether children will enrol or not in the first place and whether they will stay or drop out. For instance, according to Tietjen, (1991) poor households, with many children, pressing economic needs, and dependency on child labour keep children out of school. Lloyd and Blanc (1996) noted that even when schools are accessible and affordable, families have to see a net advantage to themselves and to their children from

having to forego their children's full-time participation in domestic and economic activities. Parents, who are unable to do without their children's labour for household responsibilities, withdraw or keep them away from school, particularly during important seasonal events like harvest and fishing.

Parental perceptions of schooling are largely influenced by society, the labour market, school environment, and household behaviour. There is no incentive for the parent to demand schooling if there is no formal employment for basic education graduates, or if the limited employment opportunities are only reserved for particular ethnic or religious groups. Equally, there is no incentive for parents to demand schooling if the school environment is hostile or uncondusive to children of ethnic or religious minorities and poor children.

Another family level factor that affects education provision is household behaviour. For example, gendered divisions of labour within the household can sharply affect the relative chances of girls and boys attending school (Colclough et al 2000: 6). In many households in developing countries, girls are expected to perform household chores, and look after young siblings. This may mean that sending a girl to school entails a bigger opportunity cost to the family than sending a boy. Secondly, due to having to perform household tasks, girls have little time to study, leading them to perform weaker than boys, which in turn leads to greater repetition and dropping out of school among girls. In brief, school access and achievement is influenced by family literacy level, economic status, and parental perceptions towards schooling.

2.5.5 School factors and ethno-regional disparities in education

Many school level factors impact on ethno-regional educational distribution. The way in which a school is organised could perpetuate inequalities. The school curriculum and financing policies impact upon ethno-regional disparities in education. According to O'Gara and Kendall (1996: 25-56) and the World Bank (1995), the major school level

factors that affect access and quality of education provision in regional developing contexts are:

- ◆ the curriculum and media of instruction,
- ◆ school calendar and timetable,
- ◆ school distance and school environment,
- ◆ teacher quality and teacher expectations,
- ◆ school management and supervision, and
- ◆ quality and quantity of text books.

A curriculum that does not respond to the needs of children from various ethnic groups and communities and that does not enable the students to be more effective in solving their life problems contributes to low demand for schooling by both parents and children. O’Gara and Kendall (1996: 25-56) point out that “curriculum goals and objectives, content and format, and relevance may deny access to some social groups such as ethnic minorities or girls by being irrelevant, incomplete, unattractive or repellent.”

The choice of medium of instruction also plays a role in access and achievement in education. The World Bank (1995:7) suggests that, “the most effective initial language of instruction is the child’s native language.” At basic education level, teaching a child in a language which is not his/her native language, which s/he does not understand well or speak at home, and that does not reflect his/her culture and way of thinking, contributes to his/her under achievement. In many developing countries children are compelled to learn in a language other than their own, be it a foreign language or a national language not spoken by everyone in the country. Children from minority ethnic groups have to learn in the language of the majority. This creates a sense of inferiority in the ethnic minority child and negatively affects his/her chance of competing with the native speakers.

Similarly, teacher quality and education finance are closely linked to regional inequalities in enrolment rates and student attainment and achievement. In peripheral regions most of the teachers are the poorly trained with little work experience. Besides, difference in per capita revenues between regions and the way primary schools in each region are managed exacerbates the inequality caused by wealth and teacher deployment.

The school calendar and the way in which the school timetable is arranged can effectively limit children's access to education (O' Gara and Kendall, 1996: 104). In most developing countries the school calendar is decided at a national level without due consideration to local factors. If a school calendar clashes with the agricultural season or nomadic population movements, it negatively affects children's enrolment and access. If a school calendar does not take religious and traditional holidays of communities into account, or fails to take climatic conditions of a region into consideration, access and equity of provision will be seriously hampered. Similarly, the school timetable greatly contributes in deciding who will get access to and achieve in education. For example, starting school very early or staying late in the afternoon negatively affects those children who have to work and those who travel long distances.

2.5.6. Ethnic factors and regional disparities in education

Research carried out in multi-ethnic countries (Crespo, 2007) such as in Mexico and (Brown, 2007) Malaysia, show that people who come from minority ethnic groups are frequently excluded from social and educational opportunities, and those who have the chance to enter the national education system perform poorly in academic terms compared with the rest of the population. Ethnically divided countries often have horizontal inequalities which in turn limit deprived groups' aspirations and opportunities.

Ethnic group's educational values, their educational expectations for their children, and control for their children's behaviour vary from one ethnic group to another, this

contributes to disparities in educational achievement. Moreover, difference in cultural background between ethnic groups is a factor in educational imbalances. Lee (1991: 134) argues that teachers' lower educational expectations for children of certain ethnic groups play a part in their poor educational performance which leads to educational disparities.

In many developing countries educational provision is distributed on regional and ethnic lines. Regions and ethnic groups' of important political and administrative individuals are favoured. For instance, Oucho (2002) and Oyugi (2000) observe that in post-colonial Kenya distribution of government resources has followed an ethnic pattern, in which important political and administrative individuals have favoured the home region, own tribe or clan.

Ethnic disparities in educational access are sometimes the result of a systematic and deliberate policy of exclusion and deprivation. Many colonial powers favoured particular ethnic groups. Thus, in exploring ethnic inequalities in education it is crucial to investigate the role of political structure in the relationship between ethnicity and education, and in particular, the role of the ruling elites and the impact of their exclusionary practices along ethnic lines. For example, for cultural and religious reasons, the Ethiopian colonial government favoured the Christian Tigrinya ethnic group in Eritrea. Similarly, as stated by Alwy and Schech (2004), the English favoured the Baganda in Uganda, the Germans the Ewe in Togo and the Belgians the Tutsi in Rwanda. Because of this deliberate and systematic policy of favouritism ethnic and regional disparities in education emerged in those countries.

However, ethnic segregation has not been confined to the colonial period alone. It is widely practiced in postcolonial African countries. For instance, in Ethiopia during the Haileseilasie and Mengistu regimes the Amahra ethnic group was favoured in terms of access to education and other facilities while the rest of the ethnic groups were neglected. Similarly, during the current Meles regime, the Tigrayan ethnic group of northern Ethiopia is the most favoured, and in the Sudan the Muslim Northerners and those who

claim an Arab ancestry are favoured, while those from the South and of African ancestry are denied equal access to education and other services (Watson, 2007:263).

It should, however, be recognized that ethnic inequalities could also be the outcome of an accident of geography. The location of an ethnic groups' home territory determines its access to public goods such as education. Ethnic groups located near the capital, a rail-line or port, or centers of commerce could take advantage of these opportunities. In Eritrea, for example, the capital city is in the highlands where the Tigrinya ethnic group live, and because of their proximity to the capital city they are well served by the different social services. This resulted in ethnic disparity in access to education between the highland and the lowland regions and between the ethnic groups that live in the highland and lowland regions.

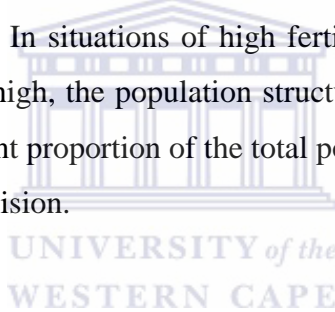
Ethnic disparities in education could also stem from the language of instruction in schools and the overall official language. Not speaking the language of instruction could lead to increased school failure and drop out. An abrupt switch from the mother tongue to another language as the medium of learning, the inadequate linguistic preparation of the pupils in that language, and the pupils' lack of exposure to that language outside the classroom generally results in high failure and dropout rates which results in ethnic disparities in education. However, there are cases in which the use of mother tongue as medium of instruction becomes the cause of inequality in access to schooling. For example, in cases where the mother tongue is not functional, and the language remains unwritten, learners are not interested to learn in their mother tongue as it does not secure mobility and paid employment and therefore become a cause for not demanding education and thereby resulting in ethno-regional disparity in education.

To put it briefly, ethnic minorities are often poor and excluded. Even when they are provided with physical educational structure, their educational achievement is often impeded by the need of ethnic minority parents for their children to work in order to contribute to living costs. Moreover, the standard curriculum may not be designed to meet the needs of minority ethnic groups that live in remote areas. Language of

instruction is often a second language for ethnic minorities. Collectively, these result in poor attendance, low attainment and high repetition and dropout rates which are all attributing factors for ethno-regional disparities in education.

2.5.7. Societal and Demographic factors and ethno-regional disparities in education

Research studies show that disparities in access and equity of educational provision are affected by the size and diversity of the target population, and its growth rate and dependency ratio. Population distribution in terms of urban or rural, the existence of nomads, refugees, working children and remote settlements affect access and equity (Wright and Govinda 1994:31-34). For example, regions that have a diverse ethnic population, a high population growth rate and dependency ratio, regions that have a scattered population and an inhospitable topography and extreme climatic conditions suffer from limited access to education. In situations of high fertility and low mortality rates population growth rates are often high, the population structure is very young, and school-age children comprise a significant proportion of the total population, which affect the nature and extent of educational provision.



Another socio-demographic factor that affects educational disparity is illiteracy. In many developing countries women who comprise about 50% of the total population are mostly illiterate, particularly those from remote rural areas and ethnic minorities. Consequently the demand for schooling by these sections of the population is low. Their children thus tend to lose out more than other groups.

Nomadic demographic groups move around because of their lifestyle. They usually miss out in terms of access to schooling for their children. Opportunity of access to educational facilities for nomads is adversely affected because of the urban-orientation or settlement-bias of most education systems. Research on education among nomads indicates that in regions where people derive their livelihood from livestock, primary

school enrolment is the lowest. Where nomad children do get schooling it is at immense personal cost both to the child and its parents.

Nomadic communities lack access to schooling due to sparse population distribution, the labour intensive nature of herding, nomads' negative beliefs and attitudes towards schooling and the lack of relevance of school curriculum. For example, it is difficult in low population density areas to gather enough pupils to make schooling cost-effective, which in turn makes governments reluctant to supply schools in such areas. In labour intensive herding economies, children's contribution to household income is very significant (Gorham, 1978). Therefore, parents here are mostly uninterested in sending their children to school. For most pastoral nomads, school and schooling are alien to them as it does not contribute to enhancing their pastoral way of life.

City slum dwellers are another section of society that fails to benefit from schooling provision. Slum dwellers are often poor. They cannot do without their children's labour related contributions to family survival. As a result, they often do not send their children to school. If they do, they pull them out before they complete primary education. For the majority of slum dwellers the urban advantage of better access to education is a myth. Even if schooling is available, slum families sacrifice the education of their children. They cannot afford the direct and indirect costs of schooling. Moreover, there simply are not enough schools within easy reach of most slum settlement.

2. 6. Conclusion

The unprecedented expansion of educational systems and educational provision of the 1950s and 1960s declined in the mid eighties because of economic down turn. As a result, access to education for the poorest group declined and educational quality deteriorated. This resulted in the emergence of educational inequalities between social classes, ethnic and religious groups, and between the sexes.

The major challenges for education in developing countries today are under-enrolment in general and ethnic and regional disparities in education in particular. Ethnic minority children and poor children in general are experiencing fewer educational opportunities and demonstrate poorer educational performance compared to majority and non-poor children.

In developing countries, there is a large section of the school-age population, who is not served by the education system due to fragile demand for education by some sections of the population on the one hand, and state and household level poverty, adverse cultural practices in the household and other societal factors on the other. The majority of those who are either denied access to schooling or provided with the low quality schools are the poorest people, residents of remote areas, and the most disadvantaged populations of countries such as ethnic and religious minorities, nomads and working children.

Gender and economic disparities are prominent in discussions of educational equity. However, ethno-regional disparity is very serious in developing countries as it coincides with ethnic, linguistic and religious disparities. Ethno-regional disparity in education has demographic, historical, ethnic, political, economic, and cultural attributes. The history of educational development in any country can explain the causes for educational disparity in a particular region or among a particular ethnic group.

In summary, ethnic and regional disparities in educational access are some times the result of a systematic and deliberate policy as some colonial and post colonial governments favoured particular ethnic groups. Geographic factors also play a role in ethnic and regional disparities in education. Ethnic and regional disparities in education could also stem from choice over language of instruction in schools and the quality of school textbooks and teachers. Furthermore, demographic factors such as the high population growth and dependency ratio, a scattered population, inhospitable topography and climatic conditions, and difficult to reach populations, such as nomads, can cause disparities in education. And at times, disparities occur due to poor demand and

inadequate supply of education. In the next chapter, I discuss the history of educational provision in Eritrea, and examine how historical factors during the different colonial periods influenced ethno-regional disparities in educational provision in the country.



Chapter 3: Educational provision in colonial Eritrea

3.1 Introduction

Education is a process that plays a pivotal role in the production of the human resources of a nation. It is also a key site for the formation of a society's values, preferences and a vision of the future. It is commonly assumed that education removes some of the major internal sources of inequality and improves the capacity of the people to participate in the management of their own affairs. However, in reality, education as a political agent either tends to safeguard the status quo or endorses change, depending on how it is organised, who organises it, and its uses. For example, according to Boyden and Ryder (1996:12) "authoritarian education systems have been used as medium of repression and apartheid, perpetuating inequality, discrimination, intolerance and prejudice." Colonial education in Africa, for instance, served the interests of the colonisers while alienating the African from his culture and language. Similarly, educational provision in a class based capitalist society upholds the interests of capital and strives to keep the *status quo* undisturbed. Newly independent African states too used education to strengthen national unity, and to maintain their political legitimacy. In short, as aptly put by Bull (1989:13) "education can be used as a weapon either to oppress people or through which oppressed people can build democracy and liberation."

As pointed out in chapter two (section, 5), the history of educational development highlights the causes for educational disparity in a particular region or among a particular ethnic group. Understanding prevailing disparities and limitations in a country requires an examination of the dynamics of previous educational development. Educational provision can only be understood by looking into individual historical, political, social and economic circumstances of different nations. For example, the uneven impact of colonialism and colonial education favoured certain regions and ethnic groups at the cost of others and created disparities in access in many colonised nations. Blakemore and Cooksey (1980:47) summed up the situation arguing that educational systems inherited

by African nations at independence have had and continue to have a profound impact on the nature and direction of social change.

Chapter three gives a historical background of the provision of education in Eritrea. It highlights the historical roots of educational inequality, specifically as it relates to provision and access. The central purpose here is to underline the fact that the various colonial education policies had a debilitating impact on current day efforts to develop education equitably. In this chapter, I discuss the provision of education during the different periods with particular emphasis on primary schooling, how it was distributed in the different regions, who benefited from it, and the number of schools and students. I also discuss the aims and objectives of schooling during each period, and how they influenced the current provision of schooling in the country.

3.2. Educational activities prior to colonialism

Education in Eritrea has passed through many stages of development. In the earlier 19th century, before the colonial times, the then existing traditional education system was run by Christian and Muslim religious structures. The indigenous Eritrean Orthodox Church schools and Islamic educational institutions existed well before the advent of missionaries and colonialism that are mistakenly credited for formal modern education in Eritrea. The Geez² and Arabic linguistic scripts were in use long before the arrival of the colonists and missionaries. Literacy in Eritrea thus was associated with Christianity and Islam rather than with missionaries or colonialism. Eritrean children were taught religious education in Quranic and Church schools.

For centuries, church education was the only source of formal education for the Christians in Eritrea. Its central purpose was to prepare clerics to be capable of interpreting the Bible and religious doctrine, and to be competent in reproducing church music and in performing traditional religious dance. The teachers were monks and

² Geez is an ancient Semitic language which has its own script. Tigre, Tigrinya and Amharic languages spoken by some ethnic groups in Eritrea and Ethiopia are derived from Geez. The Geez language is currently mainly confined in monasteries and Coptic Orthodox churches.

debteras (learned men). The children were taught the Ge'ez alphabet along with some hymns, the *Zema* (ecclesiastical music, choir-singing and dancing) and the *Kine* (a kind of rhymed poetry). They were also taught biblical explanations and exegesis. There was no age limit in church schools, or fixed periods for admission or promotion. Female enrolment was not encouraged. Simonsen (1997:71) puts the aims of the Eritrean Orthodox Church education before colonialism as:

- preparing priests, deacons, *debteras* and scribes,
- teaching a small number of the laity to read and write, and
- preserving and transmitting the church's social and cultural heritage.

Islamic education in Eritrea is as old as the arrival of the early followers of prophet Mohamed in the country who sought refuge in Eritrea from persecution in Mecca. The earliest forms of Islamic schools were known as *Khalwabs* and were set up in urban and rural areas. These schools taught Muslim children to memorise the Holy Quran and to learn the basic principles of Islam. They also taught the Arabic language. Like the church schools, the *Khalwas* had no age limit. The method of teaching was primarily based on rote learning, memorisation and oral recitation. The pupils were expected to memorise Quranic verses and recite them to their teacher before advancing to the next stage. The Islamic education system was the main agent for the expansion of education and literacy among the Muslim population in rural and urban areas of Eritrea.

Alongside these two type of education described above, Eritreans educated their children informally through story telling, riddles, poem recitation and hands-on practical training in the fields and at home long before the arrival of Europeans. As observed by Rodney (1973) and Simonsen (1997:28), education was not introduced to Africa by the colonisers or the missionaries as many would like to believe. Instead what the missionaries introduced was a new set of formal educational institutions, based on a specific set of motives. These newly introduced educational institutions and motives partly supplemented and partly replaced indigenous education and educational practices.

Colonial and missionary education “interacted with and often disrupted and displaced indigenous forms of education skills and crafts training” (Tikly, 2001:157).

The history of formal education in Eritrea is associated with the arrival of European missionaries, particularly the Swedish, the French and other Catholic missionaries and the various colonisers. Missionary education, coupled with developments in the country’s chequered colonial political history fundamentally influenced Eritrean formal education. The Italians, British and Ethiopians, through their respective colonial policies, administrative tactics, and development agendas, considerably influenced Eritrea’s modern educational history and left behind an inequitable system of education.

According to Adane Taye (1992) the development of formal education in Eritrea can be divided into six periods, namely:

- missionary schooling (1840-1941),
- the Italian colonial period (1890-1941),
- the British Military Administration (1941-1952),
- the federation period (1952-1991), and
- the Ethiopian occupation (1962-1991).



3.3. Missionary schooling in Eritrea 1840-1941

According to Simonsen (1997:73), the French Lazzarist Missionaries introduced Western education in Eritrea as early as 1840 and established educational activities in the country. In 1891, the French Charity Sisters opened a girls’ school in Massawa, and an elementary school for both sexes in Keren. Some years later in 1861 the Swedish Evangelical mission landed in Massawa, and by 1907 they were operating some regular elementary schools and evening schools in Asmara, Adi-ugri, Teseazzega, Beleza, and Himbirti in the highlands, and in Kulluku, Ghinda, Munkulu and Assab in the eastern and western lowlands (Gabrawold, 1972:52). In these schools they were teaching Tigrinya, Tigre, Amharic and German and in some of the schools a little Italian as well. In addition, the

schools were teaching history, geography, arithmetic and general knowledge (Simonsen, 1997:76). In 1889 the Swedish missionaries replaced Amharic as the language of instruction with Tigrinya and Tigre, which were vernaculars spoken in Eritrea. The Geez script was used to write textbooks in these two languages.

In 1890 Eritrea became an Italian colony. The Italians hampered missionary activities, specifically that of the French missionaries. According to Simonsen (1997:75), the Italians targeted the French Missionaries because:

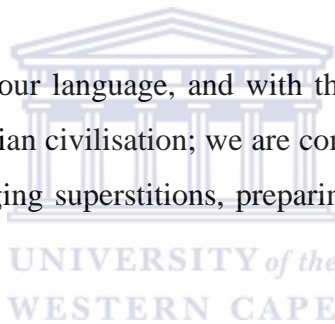
- the French were reluctant to teach the Italian language,
- the Italians wanted to control their new colonial subjects from being exposed to other influences,
- they felt threatened by the presence of the French in neighbouring Djibouti, and
- French missionary activities were considered by the Italians as incompatible with Italian colonial policies in Eritrea.

The French missionaries were expelled from Eritrea in 1895 just five years after Eritrea became an Italian colony. The two French missionaries, the Lazzarist and the Charity Sisters, were replaced by Italian missionaries, the Capuchin fathers and the St Anna Sisters. Missionaries and colonisers complemented each other, particularly when they were from the same country. For both of them colonial conquest was based on the notion of civilising the heathen. Rodney (1973:49) argues that Christian missionaries were as much part of the colonising forces as were the explorers, trades and soldiers. Arguing along the same lines, Berman (cited in Blakemore and Cooksey, 1980:31) asserted that “colonial authorities were apt to look on missions as taking part in a joint venture.” Sir, Henry Johnston (cited in Rodney 1973) extended this view about the missionaries when he said “each mission station is an exercise in colonialism.”

The Capuchin fathers who replaced the Lazzarist missionaries were mostly occupied in establishing educational facilities for the white population. The St Anna Sisters, however, were devoted to teaching the locals. According to Simonsen (1997:81), the St Anna

Sisters extended their educational provision from Assab into Asmara (1898), Segeneiti (1904) and Ghinda (1906). By 1908 the St Anna Sisters, with financial aid from the colonial government, ran elementary schools and orphanages for both sexes in Asmara, Keren and Segeneiti. Most of the educational work was carried out by the Catholic missionaries under the supervision of the colonial government. The Catholic missionaries and the colonial administration in Eritrea benefited from each other's presence. The missionaries stressed humility, docility and acceptance and the colonisers protected them against the other rival religious denominations in the country. Green (2003:1) argues that colonial conquest created the precondition for the kinds of political and economic contexts with which foreign missionaries could engage relatively unchallenged. Ezechia (cited in Simonsen, 1997:96) explains the role played by the Italian Catholic mission in Eritrea in consolidating Italian influence thus:

With our schools we propagate our language, and with the language the Italian mind, art, science, the Italian civilisation; we are coming to destroy a world of ridiculous and damaging superstitions, preparing the teams of future workers of the colony.



As observed by Svensson (cited in Pankhurst, 1972), the Italian colonial authorities in Eritrea deliberately decided to employ Italian Roman Catholic missionaries in an effort to exclude non-Italian Catholics as well as missionaries of other denominations. This is because most Christian missionaries in Africa were frequently engaged as contractors to governments for the supply of health and education services. Colonial authorities usually extended their presence into remote areas by sub-contracting the missionaries (Green 2003:2). This was particularly true about the activities of the Catholic missionaries in Eritrea. For example, the Catholic missionaries through their textbooks inculcated in the Eritrean child that Eritrea benefited from the protection of Italy, that Eritrea became prosperous because of Italian intervention and development, and the idea that Italy is their motherland, and therefore, Eritreans have to be grateful for that (Negash 1987:75).

Despite the fact that the Swedish never taught Italian in their schools, the relationship between the Swedish mission and the Italian colonial authorities was not as hostile as that between the French missionaries and the colonial authorities. In fact, the Swedish missionaries enjoyed the benefits of Italian protection and their activities were admired by the governor of the colony as indicated by the following quotation:

It should be mentioned that the Swedish perform true work of civilisation indeed. An Eritrean having attended their school or converted to their faith is simply not recognisable; he becomes educated, clean and with a certain sense of dignity not to be found among Eritreans educated by Capuchins (Martini, 1946: 66 cited in Simonsen, 1997:75).

However, this amicable relationship between the Swedish missionaries and the Italian colonial authorities did not last long because of: the continuous friction between the protestants and the Catholics, the dissatisfaction of the Eritrean Orthodox church with the activities of the Swedish missionaries, and above all, by the Swedish missionaries' failure to make any tangible effort to teach Italian to their students. For example, as pointed out by Pankhurst (1972:363), in the 1920s the Italians refused to grant visas to new Protestant missionaries and declared that they would not permit the return of those who had been absent on leave. The principal reason why the Italians objected to Swedish missionary activities was that the type of education given by the Swedish missionaries did not appear to educate the people to become obedient Italian subjects (Pankhurst 1972:363). And finally in 1935 when war broke out between Ethiopia and Italy, the Swedish missionaries were expelled from Eritrea and their properties confiscated by the Italian colonial authorities.

All the missionaries; French, Swedish and Italian, maintained that they came to Eritrea with a mission of saving souls from damnation, and to bring civilisation to the heathen and primitive Eritreans. However, this argument of saving souls for Christ was not well-founded, as Christianity was already introduced in the country centuries before their arrival. For most European missionaries in the 19th and early 20th centuries, conversion to Catholicism and Protestantism was viewed as an essential part of a global project of modernization (Green, 2003:2). Despite the fact that Sweden had no colonial territory and

no colonial ambition in Africa, its presence had to be seen as part of the overall European project of the “civilising mission”, i.e. the establishment and consolidation of control over the subject population through their transformation (Camaroff and Camaroff, 1992:235 cited in Green, 2003).

As stated earlier, the Swedish and Catholic missionaries in Eritrea were involved in limited provision of schooling. The Swedish missionaries ran some schools using the local languages of Tigrinya, Tigre, and Kunama. They laid the groundwork for using Eritrean ethnic languages as language of instruction in formal education and pioneered the transliteration of some Eritrean languages for the first time using the Latin script. On the other hand, the Catholic missionaries used Italian as medium of instruction in the government schools that they were running. In most of the early schools pupils were taught basic literacy and numeracy and a considerable amount of Christian doctrine.

According to Gottesman (1998:75), by the late 1920s the Swedish missionaries had established schools in eight centers that served over 1100 students. This fairly small number of students in missionary schools was due to the presence of:

- the two well-established religions of Islam and Orthodox Christianity, who have their own systems of education, and because of bitter opposition to the religious education provided by the two missionary outfits, and
- because of the limited job opportunities that would require literacy.

In order to gain students, the missionaries tried to incorporate some vocational skills into their schooling provision. This shift from a purely religious education to a diluted semi-secular education by missionaries was described by Fafunwa (1982:21) as a strategy which emphasised the role of the school in the continued furtherance of colonial interest in Africa.

Despite the incorporation of limited vocational training in their curriculum, missionary schools were mainly devoted to reading, writing and arithmetic skills, and rote learning

of the catechism. Provision was mainly aimed at boys. As observed by Fafunwa (1982:21), the chief aspiration of mission education in colonial Africa was to win African souls for Christ, using male teachers and priests as the main vehicles for achieving this aspiration. In short, educational provision by missionaries before and during the advent of Italian colonialism was very limited in extent, unfair in terms of distribution, and mainly limited to teaching the three Rs and scripture. It was primarily aimed at males. Hence, it did not succeed in creating a substantial literate population or a skilled workforce. It provided the foundation of the prevailing disparities in education between the sexes and the religious groups. Table 3.1 shows the extent of missionary educational provision during the Italian period in terms of religion and denominations.

Table 3.1: Missionary educational facilities in Eritrea by 1930

School	Category	Enrolment		Orthodox	Muslim	Catholics	Protestants
		Boys	Girls				
Catholic Mission schools	Private	826	517	----	----	1343	-----
Evangelical Mission schools	Private	565	275	354	14	14	458
Adventist Mission schools	Private	27	24	--	---	---	51
Total		1418	816	354	14	1357	509

Source: Based on reports from the Ministry of colonies: General statistics of colonial schools, 1930

From the above table we can conclude that even after a long presence in the country, missionary educational provision was severely limited in distribution and inequitable in access both in terms of gender and religious denomination. For example, out of the total student population of 2234, female students were only 36 percent. In terms of religious denomination 60.7 percent were Catholics, 22.8 percent were Protestants, 15.8 percent Orthodox Christians and 0.6 percent Muslims. These figures clearly show that there were disparities in missionary educational provision, which is considered to be the major cause of the current inequality between the different ethnic and religious groups. The Catholics

and Protestants had a head start over other groups such as the Muslims and the Orthodox Christianity followers.

However, we have to acknowledge that, modern formal education in general and formal education in the mother tongue in Eritrea in particular, began with efforts from missionaries. Secondly, through their work, a body of materials became available in local languages which made mother tongue education possible. Moreover, missionaries established the tradition of starting education in the mother tongue and pioneered the transliterating of Eritrean languages using the Latin script. Besides, many of the earlier Eritrean intellectuals and civil servants were educated in mission schools.

3.4. Schooling provision during the Italian colonisation, 1890-1941

Colonial education as part of the colonial project primarily aimed at inculcating respect and admiration for colonial values and culture. It is an instrument through which the coloniser controls the population, and alienates the local population from their culture. The core of colonial education policies is that the backward, underdeveloped inhabitants of the colonised areas need to be educated and brought up to the level of the superior culture of the colonising power.

According to Viswanathan (cited in Southard 1997), colonial education extends foreign domination and economic exploitation of the colony. It absorbs the colonised into the metropole, and strips the colonised people away from their indigenous learning structures. It draws them toward the structures of the colonisers. Rodney (1973) asserts that the main purpose of colonial education in Africa was to train Africans who could staff the local administration at the lowest ranks and to produce cheap labour for private capitalist firms owned by Europeans.

Basically, colonial education is about 'deculturalisation and acculturation' of the colonised and is particularly designed both in form and substance to instil fear in the colonised, make them obey the master and produce loyal servants who believe in the

superiority of the coloniser over the colonised. Colonial education was culturally impoverishing and alienating and merely strove to create a handful of elites who tended to protect the *status quo*. It was a system that left the colonised with a lack of identity and a limited sense of the past (Nugugi Wa Thiongo, 1981; Asante, 1994; and Woodson, 1993:99).

It is from this colonial educational policy perspective that I approach Italian educational provision in Eritrea. The motives for Italian colonialism do not differ much from the rest of European colonial motives. However, according to Simonsen (1997:53) and Clark (1984:47) the main motives of Italian colonialism were rooted in the need to regain the former greatness of the ancient Roman Empire, the desire for self assertion and to solve the acute problem of an exploding population in Italy by settling Italians in the new colony.

However, after their defeat at the battle of Adwa and the earlier defeat at Amba Alagi in 1895, the Italians changed their initial plan of settling Italian peasants in Eritrea. Instead, Italy began to view Eritrea as a place of trade and exploitation of raw materials that does not require enormous financial outlay. Thus the education of local Eritrean was not a high priority for the Italian colonisers. Generally speaking, there were three periods of Italian colonial rule. The first period, 1897 to 1907, was the period of no schooling for the Eritrean child. This was the time in which Martini was the governor of the colony. During these ten years the Italians failed to provide any education for the Eritreans. During the second period, 1908 to 1933 the no school policy for the Eritrean child was changed and limited access to primary schooling was allowed. The aim of this policy change was to produce literate workers for the postal and telegraphic services. During the third period from 1934 to 1941 when the Fascists were in power in Italy education was seen as useful for consolidating and supporting colonial rule.

From 1890 to 1907 the Italian colonial authorities took no initiative at all to develop a programme of public education to the local population. However, they were assisting the St Anna Sisters financially to provide education for the local population. Martini who

was the colonial governor of Eritrea from 1898-1907 was openly hostile to the idea of educational provision to Eritreans and was particularly against any mixed schools for whites and blacks. Martini's reluctance to providing Western education to the local population and particularly mixed schooling was based on the repugnance of the idea of imposing western ideas and values on the one hand, and the desire to preserve the myth of the presumed white intellectual supremacy on the other. Martini was not unaware of the role of education in producing a docile and loyal population but he was afraid of the fact that education could undermine colonial authority by giving the colonised the intellectual means to turn against their oppressors.

In 1907 Marquis Salvago Raggi replaced Martini as governor of the colony and ended the era of no schooling for the local population. Salvago Raggi was interested in employing Eritreans as clerks, administrative assistants and in the railroad and postal services. He developed a programme of public education to train personnel for these jobs. Thus, the first government school, which was a school of arts and crafts, was opened in Keren in 1909 for the sons of Muslim notables. Soon other schools of arts and crafts were opened for the sons of Orthodox Christian in Adi-ugri and for the Catholics in Segeneiti. As argued by Rodney (1973), schools in colonial Africa were usually blessed with the names of saints or bestowed with the names of rulers, explorers and governors from the colonising power. In the same manner, the school in Keren was named Salvago Raggi after the governor of the colony and the schools in Segeneiti and Adi-ugri were blessed by the names of the Christian saints San Giorgio and San Michele respectively. Likewise, a bilingual (Italian and Arabic) elementary school was opened in 1908 for the sons of Muslim traders in Massawa and was financed by the local notables. It was named the Ferdinando Martini School after the first colonial governor of the colony.

The aim of these schools and particularly the schools of arts and crafts was to give primary education to the sons of chiefs and notables. The emphasis was on manual instruction, limiting theoretical subjects to a minimum. These schools were intended to train young Eritreans for government and private employment, and to prepare Eritreans for the colonial army (Simonsen, 1997:86-87). The schools taught typing, carpentry,

telegraphy, mechanics, saddlery, shoemaking and tailoring. In addition, Italian, arithmetic and basic history and geography were also taught in the schools.

According to Simonsen (1997:86), enrolment in these schools was very negligible. The Ferdinando Martini School, for example, enrolled 38 pupils in 1908 with 30 completing. In 1913 enrolment increased to 60 pupils, but only 48 completed. The reason for low enrolment in these newly opened schools was: a general scepticism towards any kind of Western education in fear of religious propaganda being imposed on their children, and a dislike of arts and craft trades by the local chiefs, native military commanders and notables and their children for whom the schools were opened in the first place (Simonsen, 1997:104). These skills were deemed unsuitable for pupils from the upper social strata.

In spite of the provision of some education by the colonial government and the various missionaries there was no official education policy in the colony. An official circular by the colonial authorities was issued regarding education for the first time in 1916. It stated that the local children should be taught to appreciate the benefits of the Italian colonial presence and prestige. The regional commissioners had to report bi-monthly on the state of education and had to keep an eye on Muslim and Orthodox Christian Church schools. Two years later in 1918 a second educational document was issued by the governor of the colony regarding the status of the schools of arts and crafts. The document defined the scope of the schools of arts and crafts as providing civil and moral education through the training in arts and crafts and the perfection of these in order to make the pupils good workers. The document set an age limit of between 12 and 16 for admission to these schools (Simonsen, 1997).

A third education policy document was issued by the governor of the colony in 1921 in which he categorized the existing schools in Eritrea into schools of arts and crafts, elementary schools and a secondary school (Simonsen, 1997: 92). The document set the length of education for the Eritreans not to exceed four years and introduced school fees

for admission into any of the schools, except the schools of arts and crafts. The colonial authorities issued another educational document in 1928 and pronounced that:

- all schools and educational programmes had to get approval from the colonial government,
- the Italian language had to be allocated at least six teaching periods a week as a subject,
- Italian had to be the language of instruction in all schools, and
- the use of any foreign language as medium of instruction was prohibited (Simonsen, 1997: 96).

It is evident from these educational decrees and the subjects taught that the education of Eritreans was designed to produce a colonial labour class that could help diffuse Italian values and culture and thereby strengthen Italian domination in Eritrea. Pankhurst (1972: 366) summarised the core education policy objective of Italian colonialism as:

Education for “natives” was to equip them to serve more efficiently in a variety of semi-menial tasks, to indoctrinate them with feelings of loyalty and subservience toward the fascist establishment, to give them an understanding of hygiene to reduce the dangers of contamination to Italian residents among them, and to prevent them from acquiring professional or political aspiration out of harmony with the fascist ethos.

What it came down to was that Italian colonial education in Eritrea was meant to enable the Eritrean child to speak Italian moderately, know the names of those who made Italy great and know the four arithmetic operations within normal limits. As succinctly put by the Italian superintendent of schools in the colony, the purpose of Italian colonial education in Eritrea was for the child to:

Know something of our civilization in order to make him a conscious propagandist among the families who live far inland. And through our educational policy, the native should know of Italy, her glories and ancient history in order to become conscious militant behind the shadow of our flag (Negash cited in Harber, 1997:97).

Thus, education for Eritreans during the Italian occupation was based on segregation, limited in number and distribution, poor in quality, based more on indoctrination than education. Table 3.2 below shows educational facilities by region and religious groups in the colony in 1930.

Table 3.2: Education Facilities for Eritreans by region and religious group 1930

School	Location	Category	Enrolment	Orthodox	Muslim	Catholics	Protestant
Ferdinando martini	Massawa	Government	75	9	61	3	2
Salavaggo Raggi	Keren	Government	106	10	67	29	---
San Giorgio,	Adiugri	Government	159	149	4	5	1
San Michele	Segeneiti	Government	181	13	---	168	---
Vittorio Emanuele	Asmara	Government	656	462	83	90	21
Giuseppe Sappeto	Assab	Government	33	1	31	1	---
Ghinda	Ghinda	Government	30	21	7	2	---
Catholic schools		Private	1343	---	---	1343	---
Evangelical schools		Private	840	354	14	14	458
Adventist schools		Private	51	--	---	---	51
Total			3504	1019	267	1655	533

Source: Based on reports from the Ministry of colonies: General statistics of colonial schools, 1930

Table 3.2 shows the low educational provision during the Italian occupation in terms of numbers of schools and number of students. The majority of students were attending mission schools, and all schools mission or government, were in urban areas. Provision was segregated on the basis of religion and region.

In addition, the education that was provided lacked relevance as it mainly concentrated on indoctrination. For example, according to Negash (1978:75) and Simonsen (1997:98-99), the history taught at schools for Eritrean children during the Italian colonial period was about significant persons and events in Italian history and emphasised Italy as a

peacemaker and carrier of civilisation. In order to prepare boys for possible conscription in the colonial army, educational programmes for Eritrean pupils emphasised physical and military training. Gandar Dower, a British officer (cited in Pankhurst 1972:394), summed up Italy's colonial education character thus:

Under the Italians, native educations served a political purpose. The textbooks, expensively produced, were written in Italian, and glorified the *Duce* on almost every page. Military service was lauded. Boys were encouraged to become little soldieries of the *Duce*; the Fascist salute was compulsory, and at the morning hoisting of the flag Italian songs were sung.

Table 3.3 below illustrates the uneven distribution of schools across the country's regions and religious groups.

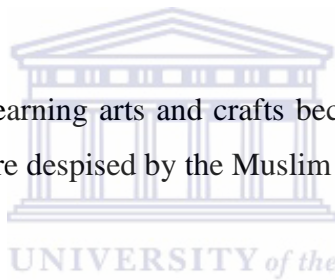
Table 3.3: Schools and enrolment by region and religious group 1934

School	Location	Enrolment	Orthodox	Muslim	Catholics	Protestant
Ferdinando martini	Massawa	118	15	93	10	---
Salavaggio Raggi	Keren	232	111	103	18	---
San Giorgio	Adiugri	242	221	18	3	---
San Michele	Segeneiti	255	82	8	165	---
Vittorio Emanuele	Asmara	1038	747	111	110	70
Giuseppe Sappeto	Assab	59	3	55	1	---
Scoula di Agoradat	Agordat	48	4	41	4	---
San Giuseppe	Asmara	47	---	---	47	---
Scoula Interna	Keren	62	---	---	62	---
Seminary	Keren	60	---	---	60	---
Scoula indigena	Adiugri	58	---	---	58	---
Scoula privata	Asmara	29	---	---	29	---
Scoula Parrociale	Asmara	182	27	---	155	---
Total		2430	1211	429	722	70

Based on reports from the Italian Ministry of Colonies general educational statistics, January 1. 1934.

As is evident from Table 3.3 above, despite the fact that the population was approximately 50 percent Muslim and 50 percent Christian, the provision was biased in favour of Christians at a ratio of 5:1. This was not a deliberate Italian education policy. In fact, the first colonial government schools were opened in Keren and Massawa, predominantly Muslim areas for the children of Muslim notables. The Muslim population's reluctance to send their children to school can be explained by:

- fear of conversion to the Christian religion,
- the nomadic nature of most Eritrean Muslims, which complicated consistent attendance,
- the courses offered at the schools of arts and crafts were of little value to the local population, and
- there was a stigma attached to learning arts and crafts because it was viewed as leading to manual jobs which were despised by the Muslim notables.

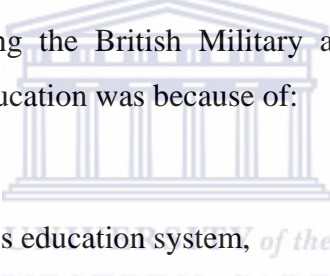


From this we can deduce that education during the Italian occupation was neither adequately provided, nor demanded by, the Eritrean population. According to De' Medici cited in Simonsen (1997:146-148) the reluctance by the Italian colonial government to provide education to the Eritrean population, was due to a number of factors, namely:

- the presence of relatively small number of colonial officials in the country,
- difficulties in organising a uniform education system because of the ethnic and religious diversity of the local population,
- the nomadic nature of the population which complicates consistent attendance, and
- low population density and lack of population centers that could justify the establishment of a school.

Negash (1987) argues that, the limited extent of educational provision during the Italian colonial period was not only due to what is stated above but because of Italy's reluctance to provide education to the Eritreans for fear of jeopardising its colonial supremacy. The establishment of educational facilities was not a high priority to the colonial government. Other observers argue that Italy's limited educational provision to the Eritreans was a result of a limited colonial budget, lack of a sustainable economy, and the brief colonial period of fifty years. Rodney (1973) observes that Italy was a backward nation from a European capitalist viewpoint, and therefore it provided its colonial subjects with a tiny amount of primary education and no secondary education.

There was a lack of demand for education by the Eritreans during the Italian colonial period as well. As stated by many of my informants who were students during the Italian period and who became teachers during the British Military administration and the federal period, the lack of demand for education was because of:

- 
- ❑ preference to their own indigenous education system,
 - ❑ fear of conversion to Catholicism and the Protestant denominations,
 - ❑ disapproval of the contents of the schooling' by pupils or their parents, and
 - ❑ the ease of getting employment with little or no education during the Italian occupation.

In brief, educational provision in Eritrea during the fifty years of Italian occupation was neither equitable nor of good quality, and it had very little impact in terms of creating a literate population or literate environment.

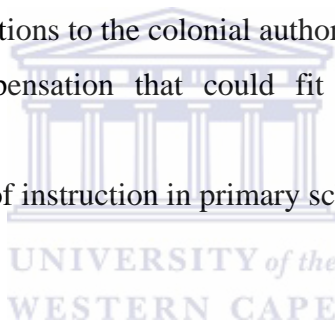
3. 5 Educational provision during the British Military Administration (1941- 1952)

In 1941 Italy lost Eritrea to the Allied forces led by the British army, and Eritrea became a UN protectorate under the British Military Administration until its fate could be decided

by the victorious forces. In the ten years between 1941 and 1952 the BMA provided education and other social services. However, British colonial educational policy was guided by bureaucratic expediency and was based on the principle that a colony can get only what it can afford from its own coffers. Thus, education provision in Eritrea was destined to be negligible as the country was poor and devastated by war.

The BMA's education policy in Eritrea was guided by the recommendations of the Advisory Committee on education in British Tropical Africa which states:

- ❑ the recognition and support of all voluntary educational efforts that conforms to the British general policy,
- ❑ reserving the right of charting the overall direction of education policy and the supervision of educational institutions to the colonial authorities,
- ❑ developing an educational dispensation that could fit local conditions and adapting education to native life,
- ❑ using the vernacular as medium of instruction in primary schools, and
- ❑ teaching religion in schools.



From this evolved an educational policy that called for the adjustment of education to local demands, employment of the vernacular as language of instruction, the subsequent production of textbooks in the vernacular, and progressively expanding education to the mass of the population (Simonsen, 1997:38). However, like all colonial education, the aim of British colonial education in Eritrea was to produce citizens who should be of use to them. One of the key aims of British colonial education was to train the local population to help them run the lower positions of the colonial administration and enterprises cheaply.

During the years as caretaker coloniser (1941-1952), the British Military Administration (BMA) did not put up any new school buildings. They reopened the schools that were closed because of the war and converted some former Italian military barracks and warehouses into schools. Adhering to their colonial educational policies of welcoming

and encouraging voluntary educational efforts, they allowed back missionaries that were expelled from the country by the Italians and gave them the freedom to expand their school networks. According to Taye (1991), the British colonial authorities intervened only when the local population signalled their interest in schooling and contributed land and a share of the cost. Thus, much of the initiative to start schools was left to the Eritrean population.

During the Italian colonial period schools were segregated on the basis of colour. There were different schools for whites and blacks. Schools were also based on religious lines. The BMA's most important contribution towards education in Eritrea was the removal of the policy of segregated education. Because of this, the number of schools grew and students' enrolment increased substantially. According to Simonsen (1997:152), in 1943 the British administration started off with 28 schools for the Eritrean section of the population, and in 1951, the number of students had risen to about 13,400, distributed in 97 elementary schools, 14 intermediate, and 2 secondary schools. In addition, the British colonial authorities called-up former schoolteachers and gave them a crash teacher training programme that focussed on school organisation, teaching methods and ways of keeping discipline, before they were deployed as teachers. However, as the BMA spent only 7,930 pounds on educational facilities in Eritrea during their ten years as care-taker colonisers (Simonsen, 1997:152) the expansion of educational facilities cannot be simplistically and mainly credited to it. Table 3.4 below demonstrates how education grew during the period of the BMA's rule in Eritrea.

Table 3.4. Primary school provision during BMA in Eritrea

Region/province	Population	Schools	students
------------------------	-------------------	----------------	-----------------

Homasién	216,000	30	5,602
Western lowland	345,000	28	1,856
Akeleguzai	189,000	18	1,879
Seraye	180,000	14	2,011
Red Sea	120,000	7	412
Total	1,050,000	97	11,760

Source: Guisepe Pugliesi (1953), *The school in Eritrea Yesterday and Today*

Despite a substantial increase in schools in comparison to the Italian colonial period, schooling in Eritrea during the BMA was still very limited in number, and unevenly distributed in terms of number of schools, number of pupils and among the regions (provinces³). According to Table 3.4, the province of Hamasién, with less than a quarter of the population at that time, had 46.7 percent of the pupil population and 30.9 percent of the total number of primary schools in the country. In contrast, the province of Western-lowland which was made up of the Sahil, Senhit and Barka regions and which had 32.8 percent of the total population had only 28.8 percent of the schools and 15.8 percent of the pupil population.

The disparities were more glaring when we look into the provision of schooling in terms of lowlands and highlands. For instance, the three highland provinces of Hamasién, Seraye, and Akeleguzai with a population of 585,000 had 64 percent of the schools and 80 percent of the pupil population. On the other hand, the two lowland provinces, the Western lowland and the Red Sea, which had a population of 465,000, had 36 percent of the schools and 20 percent of the pupil population. Table 3.4 further demonstrates that provision was geographically uneven, ethnically biased, and religiously unfair as the two provinces with the fewest number of schools and pupils were predominantly Muslim and from non-Tigrinya ethnic group. In contrast, the three highland provinces which were

³ Eritrea was divided into five provinces during the Italian and British colonial periods and eight provinces during the Ethiopian period. After independence, the provinces are reorganised into six administrative regions.

well served educationally were predominantly Tigrinya and Christian, which made regional disparity intertwined with ethnic and religious disparities. Moreover, in terms of gender, schooling provision during the BMA was also inequitable. Table 3.5 depicts gender disparities in enrolment between 1943 and 1950.

Table 3.5. Enrollment in Eritrean primary schools by gender 1943-1950

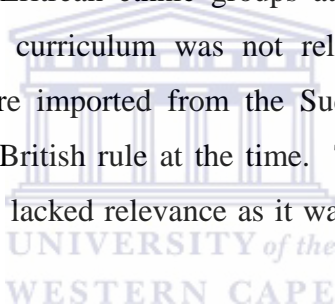
Year	Schools	Teachers	Boys	Girls	Total students
1943	28	58	2330	75	2405
1944	37	79	2670	430	3100
1945	49	109	3457	619	4076
1946	54	144	3659	712	4371
1947	59	151	3984	922	4906
1948	65	170	4140	1254	5394
1949	74	192	5675	1774	7449
1950	85	210	6658	2473	9131

Source: Eritrean Studies Review, 1996, p.14.

As shown in Table 3.5, girls’ enrolment in schools during 1943 was a mere 3 percent. However, during the successive years girls’ enrolment showed a tremendous increase. For example, in 1944 it rose to 13.8 percent. By 1950 the percentage of girls again rose to 27 percent. Though the percentage of girls’ enrolment during the BMA showed a steep increase, it remained low compared to boys. This table shows that the number of schools also rose very steadily year after year from 28 schools in 1943 to 85 schools in 1950, which meant an increase of 57 schools in seven years. However, these schools were not bigger than two or three classroom schools. If we compare the number of schools to the number of pupils, each school would have served on average of 107 pupils. Table 3.5 shows that the western lowland province had 28 schools for 1856 pupils, which meant that, on average, there were only 66 pupils per school. Therefore, the numbers of schools

were to some extent misleading and thus provision had to be seen not only by the number of schools but by the number of pupils attending them. For a country with a population of more than one million native inhabitants at that time, the existence of 97 elementary schools with three to four classrooms each shows how physically inaccessible schooling was.

In addition to the problem of physical access, which can be explained by the unavailability of schools, unavailability of a place for the child in the school or distance of the school from the child's home, there were socio-cultural barriers to educational access, such as, an irrelevant curriculum and language barriers. For example, the use of Arabic as medium of instruction in the Eritrean lowland was a barrier, as Arabic was not widely spoken by the majority of the Eritrean ethnic groups at home except for the Rashaida ethnic group. Moreover, the curriculum was not relevant to the Eritrean circumstances. The textbooks used were imported from the Sudan and other Arabic speaking countries that were under the British rule at the time. The curriculum of the Tigrinya language medium schools' also lacked relevance as it was based on the British colonial curricula.



Though schooling tremendously improved in comparison to the Italian colonial period, both in numbers and quality, it remained limited in extent, inequitable in distribution, and had problems with regard to curriculum relevance. According to Trevaskis (cited in Sebhatu, 2001: 58), there was a shortage of suitable textbooks, trained teachers, financial resources, and effective educational programmes. The curriculum was segregated for girls and boys in terms of the subjects taught. Girls were taught sewing, embroidery, weaving, mending, and cooking. These stereotypically feminine subjects served to inhibit the girl child from finding employment outside the home. In contrast, boys were taught woodworking, carpet making, and agriculture, subjects that were meant to give boys some employable skills. Moreover, access to schooling was further curtailed by lack of access to middle schools (grades 5 and 6). By 1951 there were only 14 middle schools in the country. Out of the 14, nine were in the highlands and 5 in the lowlands. None of the

middle schools were in rural areas. Thus, it appears that there was no access to middle school for rural children, and this affected the demand for schooling in rural areas.

The education system introduced by the British administration divided the country's children into Muslim children learning in Arabic and Christian children learning in Tigrinya. It also divided the country into the highlands with Tigrinya as medium of instruction and the lowlands with Arabic as medium of instruction. This was meant to lay the groundwork for the British agenda of dividing the country between the Anglo-Egyptian Sudan and Ethiopia on the bases of language, culture and religion as stipulated in the Bevin-Sforza partition plan of 1949.

3. 6 Educational provision during the Federation period 1952-1962

Before discussing educational provision during the federal period it is imperative that we know how this federation between Eritrea and Ethiopia came about. As stated earlier when discussing educational provision during the BMA in Eritrea, Italy was defeated by the allied forces in 1941, and Eritrea became a protectorate under the BMA. In 1945, debates about the future of Eritrea and the other former Italian colonies began among the victorious countries. However, they did not reach agreement on what to do with the former Italian colonies.

The question of disposing them was then brought to the United Nations in 1948. With regard to the question of Eritrea, different proposals were submitted by the UN commission of inquiry for Eritrea, ranging from independence, federation with Ethiopia, to unity with Ethiopia, without due consideration to the aspirations of the Eritrean people. In the end the American proposal was adopted and embodied in the General Assembly's Resolution 390-A (V) of 2nd December 1950 which federated Eritrea with Ethiopia. Paragraph 3 of the United Nations resolution and the Federal Act specified that the Federal Government shall have full jurisdiction over defence, foreign affairs, currency and finance, foreign and interstate commerce, and external and interstate communication,

including ports. In brief, the so called federation was designed by the United States to make Eritrea economically impotent and militarily defenceless. The federation took effect in September 1952.

In the ten years of the Federation period education expanded significantly. Parents and the general public provided building materials, labour and other donations and contributions towards school building. For the first time schools extended to the rural areas and girls started to join schools in great numbers. According to Taye (1992) as many as 82 schools were built in Eritrea during this period and a major leap was achieved in the number of pupils and teachers. The school curricula were devised to be consistent with the local environment, as well as with the country's cultural and social heritage. Table 3.6 below shows governmental and private schools and the number of pupils from 1952 to 1961.

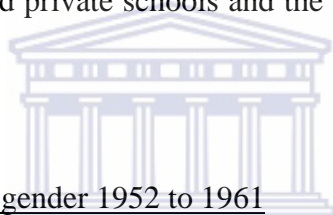


Table 3.6 Schools, teacher and pupils by gender 1952 to 1961

School Year	Teachers			Pupils			Schools
	Male	Female	Total	Male	Female	Total	
1952-53	314	43	357	10072	2891	12963	90
1953-54	339	59	398	11826	3252	15078	103
1954-55	411	68	479	13529	3233	16762	108
1955-56	442	83	525	15190	3584	18774	111
1956-57	486	99	585	15715	4327	20042	115
1957-58	507	109	616	16729	4741	21470	121
1958-59	486	113	599	15776	5125	20901	133
1959-60	552	120	672	19647	6351	25998	140
1960-61	586	129	715	12440	8039	30479	144

Source: Short history of Eritrean educational development 1984 (Amharic)

During the federal period, two high schools and three professional schools (School of Nursing, Vocational Trade School and a Teacher Training Institute) were set up in

Asmara. This motivated both parents and pupils to demand schooling as they saw opportunity in education and the possibility of getting professional employment. Arabic and Tigrinya were declared official languages of Eritrea by the Eritrean parliament and all primary school level educational provisions were given in these languages.

However, this positive trend was short lived as the Ethiopian government banned the use of Arabic and Tigrinya as media of instruction in Eritrean schools. Instead, it imposed an Ethiopian - informed curriculum and Amharic (an Ethiopian language) as the medium of instruction in primary schools. Though UN Resolution 390-A (V) provides Eritrea with a constitution that was to guarantee its autonomy with the federation, Ethiopia violated this arrangement as early as 1957. Article 91 explicitly stated that the provisions of the Federal Charter would not be amended or violated by any body other than the General Assembly. However, Ethiopia's encroachment upon Eritrea's autonomous jurisdiction began immediately after it acknowledged and ratified the federal structure. While this was happening in front of the eyes of the United Nations and the United States who initiated and helped implement the federation, they failed to take any action on the petitions sent by Eritrean political leaders. And finally, the Ethiopian government unilaterally dissolved the federal arrangement in 1962 in violation of the United Nations Resolution and in flagrant defiance of the will of the international community. Thus, the Ethio-Eritrean federation lasted for only ten years, after which Eritrea became the fourteenth province of Ethiopia.

The motive was to undermine Eritrean national identity and political aspirations, and inculcate Ethiopian cultural values in the young generation. The Ethiopian government made every effort to suppress Eritrean identity, culture and tradition, and destroyed all books written in Eritrean languages. Moreover, all publications in local languages were discouraged or banned outright, with the exception of a single newspaper, written in Tigrinya and Arabic, which Ethiopia used for propaganda purposes.

All the optimism and the frenetic construction of schools by Eritreans came to an end by the introduction of the Amharic language and the Ethiopianization of the curriculum. This change of language of instruction, change of script, change of curriculum and the replacement of Eritrean teachers by Ethiopians irritated the Eritrean public. Hence, many parents, particularly in the lowlands, where Arabic was the medium of instruction, withdrew their children in opposition to Amharic and Ethiopianization. This further perpetuated the educational disparities between the lowlands and the highland regions and between the Muslim population and the Christians.

3.7. Educational provision during the Ethiopian colonisation 1962-1991

Ethiopia formally annexed Eritrea in 1962 and in 1963 introduced a new curriculum and new textbooks. As was said before, the aim of the new curriculum was to Ethiopianize Eritreans. Ethiopian teachers were brought in to join the teaching corps in Eritrea. In the same year the Ethiopian government abolished the Eritrean publications committee and burned Arabic and Tigrinya textbooks that were used by the Eritrean education department during the federal period. Moreover, in order “to keep Eritrea backward in relation to other parts of Ethiopia proper, enrolment in Eritrean schools was frozen while other areas of Ethiopia received expansion funds” (Gottesman, 1998:81).

As Ethiopian colonialism took an incorporationist form, it did everything to erase Eritrean identity, language, and culture. The Ethiopian government attempted to acculturate Eritreans by obliging them to spend an unreasonable amount of time acquiring the Ethiopian colonial language and an understanding of the coloniser’s history. Education was a key instrument to realise Ethiopia’s colonial aims. According to McNab (1989:61-86) and Teklehaimanot (1996:1-17), Ethiopian education policies in Eritrea between 1962 and 1974 were designed to erase Eritrean national identity, foster Ethiopian nationalism, facilitate the growth and development of the Amharic language, and curtail access to education for the Eritrean child.

Kane (1997:27) noted that, in order to implement the above stated policies, the Ethiopian occupiers changed the curriculum to reflect Amharic cultural values and political aspirations. As part of its long-term strategy to undermine the Eritrean identity, the Ethiopian occupation provided a mediocre education in content, which was unevenly diffused, and allowed the standard that had been achieved during the British administration and the federal period to deteriorate.

To obliterate Eritrean identity and nationalism it introduced an Ethiopian - based curriculum with an overdose of Ethiopian literature, history and geography. It used Amharic as language of administration in the education system, and staffed all higher posts in the education departments with Ethiopians. It removed all signs and symbols that signified Eritrea and enforced the compulsory hoisting of the Ethiopian flag in schools every morning. Singing the Ethiopian national anthem became compulsory in schools.

In order to legitimate their occupation and brainwash the Eritrean child, the Ethiopian occupation fabricated history and presented the Ethiopian emperor as saviour from Italian colonialism. School walls, textbooks and other teaching learning materials were decorated with pictures of the emperor and his family. In addition, all Eritrean schools were named after Ethiopian rulers.

Moreover, in order to facilitate the growth of the Amharic language it made Amharic the sole medium of instruction in Eritrean primary schools and the working language in all government offices in Eritrea. The use of all other languages in school was banned, and Amharic was taught as a compulsory subject throughout the education system (Semere Haile, 1987:14). A good pass mark in Amharic became a requirement for university entrance.

The discussion above indicates that Ethiopia practically denied access to education to the majority of Eritrean children by its policies of using Amharic as a medium of instruction, by introducing an Ethiopian-oriented curriculum and by making a good pass in Amharic a compulsory requirement for university entrance. The introduction of the quota system,

which was deliberately manipulated to discriminate against Eritreans, was an additional obstacle to educational access.

Despite the deliberate policy of denying access by the Ethiopian colonial government and the low demand for education by some sectors of the Eritrean population, the number of schools and students still grew. This was because until the mid 1970s Ethiopia was not viewed as an occupying force by the Christian highlanders. Therefore, there was little objection by that section of the Eritrean population either to Amharic as medium of instruction or the Ethiopian curriculum in general. Secondly, after many years of exposure to modern education some sections of the Eritrean population developed positive perception towards education and hence demanded education for their children. Thirdly, as it became very difficult to secure paid employment without education, education was considered as a means of survival and was therefore demanded. Table 3.7 below illustrates educational development in Eritrea from 1963 to 1974:

Table 3.7: Number of pupils, teachers and schools (1963-1974)

Year	pupils	Teachers	Schools
1963	64,753	1953	398
1964	67,223	1960	411
1965	73,952	1977	414
1966	77,889	2130	424
1967	83,360	2327	432
1968	90,349	2463	423
1969	98,711	2567	416
1970	98,363	2524	414
1971	103,443	2624	417
1972	115,084	2691	429
1973	116,828	2789	437
1974	124,752	2661	472

Source: Short history of Eritrean educational development 1984

In 1974 a new regime came to power in Ethiopia. This regime's educational policies in Eritrea were not that different from that of the regime it replaced. Both were bent on erasing Eritrean identity, fostering false Ethiopian nationalism, facilitating the spread of

Amharic at the cost of Eritrean languages and denying access to Eritreans under different pretexts. However, this new regime, contrary to the old regime, launched a mass literacy campaign and used a number of ethnic languages including one or two Eritrean languages, which was a positive shift from earlier Ethiopian education and language policies (MacNab, 1989).

During the last decade of Ethiopian colonialism, as the liberation war intensified and Ethiopia was confined to the highland areas and into some towns in the lowland areas, Eritrean children were practically denied any access to schooling. Many schools in the rural areas were targeted by Ethiopian warplanes and artillery. Most of the schools in the towns and cities were used as military barracks. For example, between 1976 and 1991 not a single school was built and by 1991 only 16% of the 381 primary schools were in serviceable condition (UNICEF, 1994:93-94). Eritrean teachers were targets of repression and abuse. Teacher attrition was very high and education provision was adversely affected both in quantity and quality. Because of the state of war, education was not a priority either to the authorities or the Eritrean parents. Because of the war educational disparity was created between rural and urban areas, the lowlands and the highlands, and the different ethnic groups.

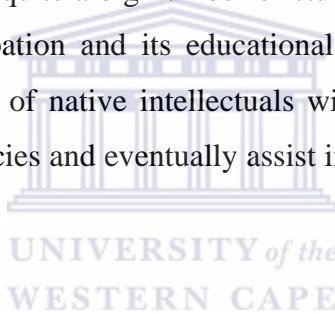
Despite its policy of deculturation and acculturation and taking the state of intensive war of liberation, and Ethiopia's limited economic capacity into consideration, Ethiopia had positively contributed towards expanding school access in Eritrea in comparison with the earlier colonial powers that ruled the country. For example, Table 3.8 indicates the growth of educational provision during the final years of Ethiopian occupation in Eritrea.

Table 3.8: Student enrolment by level 1988-1991

Level	1988/89	1989/90	1990/91
Primary	128,504	115,869	109,087
Middle	29,496	27,867	27,556
Secondary	30,347	32,357	32,140

Source: Eritrea basic education statistics 1996/97

In fact, it was during the Ethiopian period that education provision expanded in Eritrea both in terms of quantity and quality. It was during Ethiopian colonialism that many high schools were established in Eritrea, and quite a big number of students started to Access University. It was the Ethiopian occupation and its educational system that provided Eritrea with quite a substantial number of native intellectuals with the knowledge and confidence to challenge its colonial policies and eventually assist in the decolonisation of Eritrea.



3.8. Conclusion

Educational disparities do not happen in a vacuum. They have a very specific history. They are embedded in the social, economic and political relationships and interactions in society. In Eritrea, during the Italian colonial period schools were designed along religious, regional, and ethnic lines. Disparities in education result from the relationships between ethnic and religious groups and the governments that prevail in a particular country. Many forms of disparities in education as we have observed in the study are related to historically developed socio-cultural factors.

The meagre educational provision during the respective colonial periods were confined in urban areas that were suited for colonial interests, which show there was no political interest during those periods in the marginal regions. Missionaries and the colonisers

were basically interested in teaching males, because missionaries were concerned in the production of male priests and catechists who can spread the gospel to the heathen, and the colonisers were mainly interested on males as cheap labour and for the war efforts. This brought about disparities in education between the sexes.

Missionaries and colonisers deliberately favoured particular ethnic and religious groups in the provision of access to schooling. The Catholic missionaries favoured those who converted to the Catholic faith and the Swedish missionaries those who were converted to the Protestant faith. Thus, these two religious groups had a head start in education which they used to improve their socio-economic status and wellbeing. This brought about disparities in education between followers of Islam and the Eritrean Orthodox church on the one hand, and the other two religious denominations on the other hand. In addition, the colonial authorities and particularly the Ethiopian one favoured the highlands to the lowlands, Christians to the followers of the Islamic faith and the Tigrinya ethnic group rather than the other ethnic groups. Because of this systematic and deliberate policy of favouritism ethnic and regional disparities in education emerged in Eritrea.

During the respective colonial periods medium of instruction was a major stumbling block to educational access. The high dropout rate in the Eritrean schools during the Italian period demonstrates this fact. Imposed medium of instruction hampers educational access as witnessed by the opposition to Amharic in the Eritrean lowlands. Therefore, because of the alien and imposed medium of instruction little education took place and some sections of the community totally boycotted formal education. This created disparities between the different communities.

In short, missionary and colonial education had impacted the Eritrean population differently. Eritrea inherited a dilapidated education system, inadequate in access, inequitable in distribution between regions, urban and rural areas and between the various religious groups. The implication of this was:

- an 80 percent illiteracy rate among the population,

- visible shortage of skilled human resources,
- skewed development and marginalisation of the Eritrean economy, and
- an overall disparity between urban and rural areas, centre and periphery and between the different ethnic groups and the sexes.

However, it is important to acknowledge that the colonial period had some positive features. The threat of the Ethiopian language and culture led to a renewed interest in indigenous languages and cultures among Eritreans. This, in turn, contributed to the development of nationalist movements in the country. Colonial education provided a key mechanism and a model for the spread of modern forms of education in Eritrea. It spread a common structure of schooling throughout the country. Colonial education in Eritrea thus provided the basis on which postcolonial education have had to build. It was instrumental in the spread of Italian, English and Amharic languages in Eritrea.

At independence in 1991 Eritrea had to rectify disparities in the nature of the provision that it inherited from its colonial past as well as addressing the low quality of education. Consequently, an independent Eritrea had to set up the necessary educational infrastructure, develop education policies, and train human resources to staff the newly developed educational infrastructure. In this respect, it adjusted the length of education cycles, changed the curriculum content and linked education and training to requirements for national socio-economic development. In the next chapter, I examine the post-independence Eritrean education reform process and consider the extent to which the country had succeeded in rectifying the wrongs it inherited from its colonial past.

Chapter 4: Post independence Macro-educational reforms

4.1. Introduction

As already explained in chapter three, subsequent to a century of colonial rule, Eritrea inherited an education system which was inadequate in quantity, deficient in quality and unevenly distributed in terms of region and linguistic groupings. The Eritrean people had no say whatsoever in what their children had to learn and even in the choice of medium of instruction. As an aftermath of this colonial legacy, the 1998-2000 border war with Ethiopia, and the prevailing state of unstable peace, the Eritrean education system is still battling with inequitable access, poor quality and internal and external inefficiencies. In addition, the system is suffering from poor educational governance, overcrowded classes, poorly performing students and the presence of ill-trained and unmotivated teachers.

According to a World Bank report (1997:1-3) access to education in Eritrea is very low with substantial regional differences. The education system is characterized by low internal efficiency, high rates of failure and repetition at all grade levels. Children of nomadic and other marginalized groups are under enrolled in school, and are more often over-age. They tend to repeat grades more than the other groups and drop out of primary school before completion. Similarly, gender differences in access and achievement are part of the existing pattern of schooling provision in the country.

As indicated by the ESDP report (2005: iii-iv) and a World Bank report (2003), the Eritrean education system is characterized by poor quality manifested in low learning outcomes, caused by inadequate time-on-task, poor teacher quality and an unsatisfactory physical learning environments. The Eritrean education system tends to be wasteful of resources with a 20% repetition rate at each grade each year, and 7.6 student-years of average input per child for primary school completion (ESDP, 2005: iii). The education system suffers from limited institutional management and financial capacity.

As noted elsewhere in the thesis, the organisation and structure of schooling reproduce social, economic, political and cultural inequalities in developing countries. According to Thomson, (1981:202) education systems hardly ever serve the needs of the whole population or even the needs of a large proportion of those fortunate enough to be admitted. It often under-serves minority students and thus reproduces the *status quo*. Therefore, educational reform is deemed necessary in order to improve educational provision, make it more equitable and change the status quo in favour of those who are denied equal educational opportunities. However, as argued by Levin (2001:4), education reform can only be understood appropriately in historical and cultural perspective with particular socio- economic, political and institutional circumstances. Thus, one has to relate reform to historical developments.

Cognisant with this view the government of Eritrea and the Ministry of Education (MOE) embarked on reforming the education system to rectify these and many other ills carried over from the colonial period. This chapter discusses the experiences associated with the Eritrean educational reforms over the last ten years and explores the role of the education reforms in addressing the educational disparities it inherited from the country's colonial past. In the first section of the chapter I give a brief synopsis of the current state of primary schooling provision in the country so as to comprehend the overriding motives for the reform. In the second section, I discuss the government's efforts to reform the education with the view to understanding how it addressed the myriad of challenges that the system faced. In the third section, I discuss some of the major constraints that impacted on education reform initiatives, and argue that despite commendable efforts by the MOE educational challenges still exist. In conclusion, I pull together the major conceptual parts of the chapter and try to link it with the whole thesis.

4.2. The Eritrean Educational Context: Strengths, Challenges and Constraints

As noted in chapter three, the existing pattern of provision of schooling in Eritrea is the outcome of a history of colonisation. Its origins can be traced to the Italian, British and Ethiopian colonial conquests. Regionally differential access to basic services and capital

concentration during the colonial periods contributed towards the widening of income disparities, as well as regional developmental inequalities which evolved along ethnic lines. Some had better access to opportunities than others. Hence, even if ethno-regional disparities are not totally the making of colonialism, the roots of regionalism and ethnicity in Eritrea lie deep in the colonial situation.

Thus, at independence, educational access was extremely limited in terms of coverage and infrastructure. In 1993, only “37% of school buildings were rated to be in good condition, and the remainder were gutted, or badly damaged, or in most cases allowed to deteriorate to a broken down state” (UNICEF,1994:102). Even today ten years after independence, there are over 100 schools that still function under the shade of trees due to the lack of normal classrooms (MOE, 2003:3). The teaching force is inadequate both in terms of numbers and qualifications. UNICEF (1994:100) reported that the teaching staff in Eritrea after independence suddenly dropped by 52% as those Ethiopian teachers who were recruited by the occupying administration left the system. Those Eritrean teachers who were recruited directly from high school by the Provisional Eritrean Government lacked training and experience.

The UNICEF study (1994:100) asserts that many of those teachers were rushed into service without adequate training. Teaching and learning materials were inadequate in quantity and quality and the curriculum was outdated. Eritrea, therefore, faced daunting challenges in its quest to provide equitable access to quality basic education for all. In the next section of the chapter, I provide a sketch of the prevailing pattern of access, equity, quality and relevance in the provision of primary schooling in Eritrea so as to appreciate the complexity of the task to the Eritrean education system.

4.2.1. Low access and equity

Despite the fact that access to basic schooling has expanded commendably since independence, there is a substantial number of school age children out of school. By 2001/02, ten years after independence, about 270,000 school age children (53.98%) have

still not enrolled in primary schools, which presents a major challenge to the government (Eritrea, Essential Education Indicators, 2002).

According to a World Bank report (2003:2-3), the overall low enrolment in Eritrea is the result of limited physical capacity of existing schools, the lack of fiscal resources to bring schools closer to learners and the overall state and household level poverty. Eritrea is among the least developed countries in the world, ranking 155th out of 175 countries in the UNDP Human Development Index (HDI) for 2003. Thus, as suggested in the Eritrean National Education Policy (2003:13), “with a low per capita income and widespread poverty, Eritrea’s ability to mobilize sufficient domestic funds to finance the provision of learning opportunity to all citizens is limited.”

Similarly, the Ministry of Education has identified physical inaccessibility of schools and the high cost of supplying physical infrastructure as causes for low access. A survey done by the MOE in 1996 shows that students travel an average about 9.7 kilometres one way to school (MOE,2001:41). The construction of one classroom in Eritrea costs US\$ 35,000, which is expensive compared to other developing countries (World Bank, 2003). In addition, Eritrea’s demanding physical environment, rugged mountains, deserts with temperature that exceeds 40 degrees Celsius, poor communications, and a low density population all have a negative impact on the provision of adequate educational access.

Despite the substantial increase in enrolment in all the regions after independence, the gap between the regions is still very wide. For instance, the two eastern lowland regions of the Northern Red Sea and Southern Red Sea regions are far behind the national average of 56.5 percent and 38.9 percent gross and net enrolments ratios respectively. The major causes for these regional disparities were the politico-military situation of the country during the colonial period and the impact of the socio-economic and geographic realities of the different regions.

With regard to equity by gender, as aptly put by the Dakar Framework for Action (2000:16), gender based discrimination remains one of the most intractable constraints

for realizing the right to education in most developing countries. This is also true for Eritrea. As clearly stated in Article 3 of the World Conference for Education for All, increasing access to and improving the quality of education for girls and removing obstacles that hamper their active participation is an urgent priority of all developing countries. In line with this, current day Eritrean education policy underlines the need to reduce the gender gap in enrolment and retention (National Education Policy, 2003:7). However, significant disparities still exist between boys and girls in school enrolment and achievement. According to the World Bank (1997:1-3), there are substantial gender differences in access, persistence and achievement in the Eritrean education system. Table 4.1 shows disparities in gross enrolment ratios by gender.

Table 4.1: primary level gross enrolment by gender 1991/92-2000/01

Year	Total	Male	%	Female	%
1991/92	150,982	81,746	38.7	69,236	34
1992/93	184,656	102,235	47.1	82,421	39
1993/94	208,199	115,663	51.9	92,536	43
1994/95	224,287	124,544	54.4	99,743	45
1995/96	241,725	133,471	56.8	108,254	48
1996/97	240,737	132,250	54.8	108,487	46
1997/98	247,499	135,569	54.7	111,930	47
1998/99	261,963	143,578	56.4	118,385	48
1999/00	295,941	162,896	62.3	133,045	52
2000/01	298,691	164,523	61.2	134,168	52

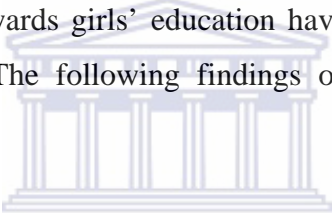
Source: Eritrea Basic Education Statistics 2000/01

This table shows that despite the steady increase in female enrolment gender disparities have existed throughout the Eritrean education system. In 2000/01 for example, the gross primary school enrolment ratio for girls was 52 percent and net enrolment ratio was 36.4 percent. Moreover, as shown by all the education indicators, girls tend to repeat and drop out more than boys and they have lower levels of achievements. The monitoring of learning achievement (MLA) study results show that girls are outperformed by boys in the grade three and grade five tests and across all learning tested (MLA project report, 2002:19-20). Some of the major causes of gender disparities in the Eritrean education system are the inadequate supply of female teachers, with only 40.6% of the teachers at

primary being female. The insufficient integration of gender issues and concerns into the curriculum at both school and teacher training levels is also a contributing factor.

A study conducted by the MOE in 2001 found significant gender bias in the elementary school textbooks. For example, names and illustrations in primary school mother tongue textbooks showed the dominance of male names and characters (70% male; 16% female). Similarly, pictures and illustrations in primary school science textbooks showed very few female representations (71% male; 11% female).

However, although the above stated internal factors influenced girls' participation and retention negatively, the cultural, religious and economic factors also play a key role (Kane, 1996:16). For instance, the demand for girls' labour, patrilocal living arrangements, and parental attitudes towards girls' education have negatively impacted educational gender equity in Eritrea. The following findings of a UNESCO survey reinforce this conclusion:



The major bottleneck for an increased participation and retention of girls are external to the school system and are strongly related to the prevailing socio-economic environment and to a great extent to the ethical values of the communities to which they belong (UNESCO, 1996:30).

4.2.2. Low quality and low relevance

Prior to independence the Eritrean education system was characterized at all levels by its low and irrelevant quality and content. A UNICEF report (1994:93) maintains that colonial education in Eritrea failed to address the question of skills training relevant to the productive needs and interest of Eritrea's population. The report indicated that education was essentially academic in orientation and insufficient for the needs and interests of ordinary Eritreans. Educational provision in Eritrea during the Ethiopian colonial period continued with this essentially British inspired academic orientation

simply revising it to reflect Ethiopian cultural values and political aspirations (UNICEF, 1994:93).

The problem of deficient quality and relevance was not only a colonial phenomenon. Even after independence, the Eritrean education system manifested internal inefficiencies, such as low student attainment, high student repetition and drop-outs, weak teacher preparation, inadequate instructional materials, and the improper use of teaching materials. In one of its evaluation reports the MOE described the post independence curriculum as “predominantly supply driven with little relevance to the country’s job market” (MOE, 2003:3). For instance, in 2001 the Ministry of Education conducted a study to monitor learning achievement in elementary education. The study found that the enormous efforts to expand educational access were not yielding the desired results. Moreover, the study revealed differences in performance between towns and rural areas, and between boys and girls. (ESDP, 2005:21).

Other causes for the low quality education in Eritrea were inadequate physical learning environments, inadequate instructional time, poor teacher quality, limited participation and an outdated curriculum. Pertaining to the inadequacy of learning environments and instructional time of the Eritrean education system, a World Bank report (2003:2-3) indicated that the physical environments of schools is not conducive to effective teaching and learning. The average pupil classroom ratio is 63:1 at elementary level thus impeding quality learning. With regard to instructional time, the report pointed out that the Eritrean school day is very short - a maximum of four hours of learning time, which adds up to 720 clock hours per school year (ESDP, 2005). A World Bank report shows that approximately 30% of Eritrean elementary school teachers are unqualified and that providing a relevant curriculum receives high priority.

Internal efficiency indicators are also unacceptably low in Eritrea. According to the Essential Education Indicators (2001:27), in 2000/01 the repetition rate for elementary schooling was 22.9 percent and the dropout rate was 6.3 percent. In general, it takes about 8.4 years to complete a five year programme of elementary school in Eritrea. If we

look into internal efficiency by region the picture is daunting. For instance, in 2000/01 the average length of study per student at primary level (grades 1-5) was 9.6 for the Gash-Barka region, 8.8 for Southern Red Sea and 8.7 for Northern Red Sea regions (Essential Education Indicators, 2001:30).

As stated earlier in this chapter and elsewhere in the thesis, (see Chapter three), it can be concluded that the Eritrean education provision is unevenly distributed. It is also characterized by poor quality manifested in low learning outcomes. Moreover, the country's primary school system is characterised by low internal efficiency as manifested in high repetition rates and dropouts. This situation called for immediate and thorough approach to educational reform in the country. In the next section of this chapter, I discuss the government's reform efforts with the view of understanding how it addressed the myriad of challenges that the system faced.

4.3. MOE education reform efforts



In previous chapters of this thesis and in the earlier sections of this chapter, I referred to the prevalence of substantial disparities in the Eritrean education system in terms of region, language, and ethnicity. In this section I discuss how educational reforms initiated by the government addressed the problems of access, equity, quality and efficiency within the education system. This section is primarily based on analysis of government policy papers, documents and related concept papers produced by the MOE. In addition, the section analyses documents and reports produced by the World Bank and UNICEF related to the Eritrean education sector.

It is commonly assumed that governmental educational reforms are meant to reduce inequality and enhance the quality of an education system. Therefore, it is a top priority political issue for many governments. Educational reforms are often recommended by multilateral lending institutions such as the World Bank and IMF, which in one way or another, influence developing country's education policies. International phenomena such as EFA and Millennium Development Goals for example, require substantial

educational reforms in order to achieve a country's development goals (Fowler, 1995; Halpin and Troyna, 1995). In addition, many education researchers allege that this has to be achieved in the face of widespread assumptions about the government's use of education reforms to enhance its own legitimacy among its people. Boli and Ramirez (1992:38) note that "schooling the masses became a highly legitimate and legitimating project."

Educational reform in post-independence Eritrea I would argue could be described primarily as a carry over from the objectives of the struggle for independence. During its struggle for independence, the EPLF, which formed the current Eritrean government, strongly emphasised the need for broad-based mass education. The government's national macro-policy outlined a reform vision based on the creation of a modern, technologically advanced and internationally competitive economy characterized by self-sustaining growth and an efficient free market economy (GSE: Macro Policy Document; 1995 and ESDP, 2005:7).

Its macro education policy vision as noted in the GSE: Macro Policy Document (1995), was underpinned by a societal reform that included improved agricultural production, knowledge intensive and export oriented industries, a decentralized and democratic political system, and broad based educational provision that incorporate widespread dissemination of skills. The strategy proposed for achieving these goals is based on human capital formation, with education and health as key inputs. The overall objectives of the education sector within the macro development policy were formulated as follows:

- to produce a population equipped with the necessary skills, knowledge and culture for a self-reliant and modern economy,
- to develop self-consciousness and self-motivation to fight poverty, disease and all attendant causes of backwardness and ignorance, and
- to make basic education available for all (GSE: Macro-policy Document; 1995).

The basic components of the education policy as indicated in MOE (1997:29) include:

1. Free and compulsory basic education.
2. A secular curriculum and the right to be taught in ones own language at primary school level.
3. Reducing the gender gap in enrolment and retention.
4. Giving priority to those regions which in the past have been deprived of educational opportunities due to war and other related factors.
5. Promoting equal opportunities in terms of access, equity, relevance and continuing of education to all school-age children.

Thus, the Government's Macro Policy, referred to above, puts the provision of basic education to all, regardless of ethnic origin, sex or religion, as one of its basic objectives. The Ministerial document 'Our People Are Our Future: A Framework for the Development of Human Resources in the Education Sector' (2001:27) states that the education system should provide all citizens of the State of Eritrea with access to quality education relevant and responsive to individual and national development needs and should take note of the special circumstances of specific social groups. Similarly, the government's 'Concept Paper for a Rapid Transformation of the Eritrean Education System' (2002:5-6), suggests that the Eritrean Government should make all the necessary changes and reforms to enable the Eritrean education system to measure up to the needs of the country. The Ministerial draft document, 'Eritrea: National Education Policy' (2003:6-7), urged that educational investment be evenly spread among all demographic and geographical diversities of the country. It called for ensuring equal participation of girls in all education programmes, requested the provision of support for the needy to ensure normal progression, and demanded a reduction in gender, regional and rural/urban disparities in educational participation.

In implementing these policy pronouncements and guidelines the government of Eritrea has adopted EFA and recognized that primary education must be the basic means for achieving it. Thus, in its effort to achieve EFA the government assumed the role of funding schooling and making it compulsory for all children of primary school-age (UNICEF, 1994:95) to attend school. Hence, immediately after independence, the

Eritrean government embarked on reforming the colonial education system it inherited from the Ethiopian occupation. It replaced the primary school curriculum with one that was inspired by curricula that operated in the liberated areas⁴ and cleansed the Ethiopian high school curriculum. It replaced the medium of instruction at primary school level from Amharic with eight ethnic Eritrean languages. It also modified the schooling structure from 6+2+4 to 5+2+4⁵. The government also deconcentrated the education system administratively by expanding the educational structure to include regional education offices, sub-regional education office and offices at school level. It also intended to expand access by giving priority to rural areas and previously underserved regions and sections of the society.

As a result, the total primary school GER level has risen from 150,982 students in 1991/92 to 330,278 students in 2001/02, which represented a sizeable increase of 118.7 percent. In terms of gender enrolment during the same period, the male GER increased from 81,746 to 184,060 students an increase of 125.2 percent while that of female students increased from 69,236 to 146,218, an increase of 111.2 percent (Essential Education Indicators, 2001/02). However, despite these educational reforms, unremitting inequities in provision and deficiency in education quality persisted in the Eritrean education system, necessitating further educational reforms.

Ten years after the initial education reform initiative, the MOE introduced other educational reforms intended to contribute to increased provision, equitable access, improved quality, effective delivery and efficient management. The reforms aimed at correcting the misallocation of resources within sectors and rectifying their inefficient use. The new educational reforms included changing the schooling structure from the 5+2+4 to 5+3+4. The reason of this change was to provide Eritrean children with eight years of basic education, which, according to the education policy of the country was an expression of the country's commitment to free and compulsory education. The MOE

⁴ During the armed struggle for independence the Eritrean Peoples Liberation Front was running schools in the liberated areas and in refugee camps using a curriculum it produced in the field.

⁵ A system of 1-6 primary, 7 and 8 intermediate and 9-12 secondary school was replaced by 5 years of primary 2 years of intermediate and 4 years of secondary school.

revised the curriculum to be learner centred and introduced core and selective subjects with the aim of making the primary education curriculum relevant and work-oriented.

As indicated earlier in this chapter, the major educational issues that necessitated reforms were inadequate educational access, deficiency of educational quality, and low internal efficiency. From 2002 onwards the MOE adopted a number of policy positions to more urgently address these issues, including, among others:

- Increasing access for poor, rural children and girls.
- Expanding physical capacity.
- Decreasing repetition and improving efficiency.
- Revising the curriculum and improving production and delivery of materials.
- Training and supporting teachers.
- Restructuring the MOE's functions and offices (Eritrea: National Education Policy (draft), 2003:8 and ESDP, 2005:30-39).

In the next section I discuss each of the above policy options adopted by the Ministry of Education in order to understand its efforts of implementing the education reforms.

4.3.1. Improving access for poor, rural children and girls

In line with the above stated policies the government of the state of Eritrea adopted a number of reform measures aimed at enhancing access to schooling for the poor, rural and the girl children through the construction of low cost durable classrooms in previously underserved areas, targeted interventions aimed at girls and disadvantaged children, and the introduction of a double shift schooling system (MOE 2001:80-81).

The MOE adopted a strategy of identifying neglected or under-served areas through the development of indices of inequitable access. It also adopted a strategy of bringing schools closer to marginal areas by constructing new schools and classrooms, and constructing boarding school in areas of neglect (ESDP, 2005:37). Moreover, with regard to enhancing the appreciation of the benefits of education among the rural poor and

minority communities and thereby increasing access, the MOE adopted a strategy of sensitising the public about the importance of schooling by using community based educational campaigns. The MOE attempted to reduce the direct and opportunity costs incurred by families who send their children to school by providing subsidised school supplies, waiving mandatory school uniforms in poor remote rural areas, and introducing school feeding programmes (MOE,2001:45-46).

In order to persuade parents to send their girl children to school, the government, with the support of UNICEF and the National Union of Eritrean Youth and Students (NUEYS), introduced an inducement program in which they offered scholarship to needy students. They also gave financial support to needy parents to compensate for the income they would forego by sending their children to school. Similarly, with the support of World Food Programme (WFP) and other aid agencies, the government introduced school feeding programme in rural areas to support school going children.

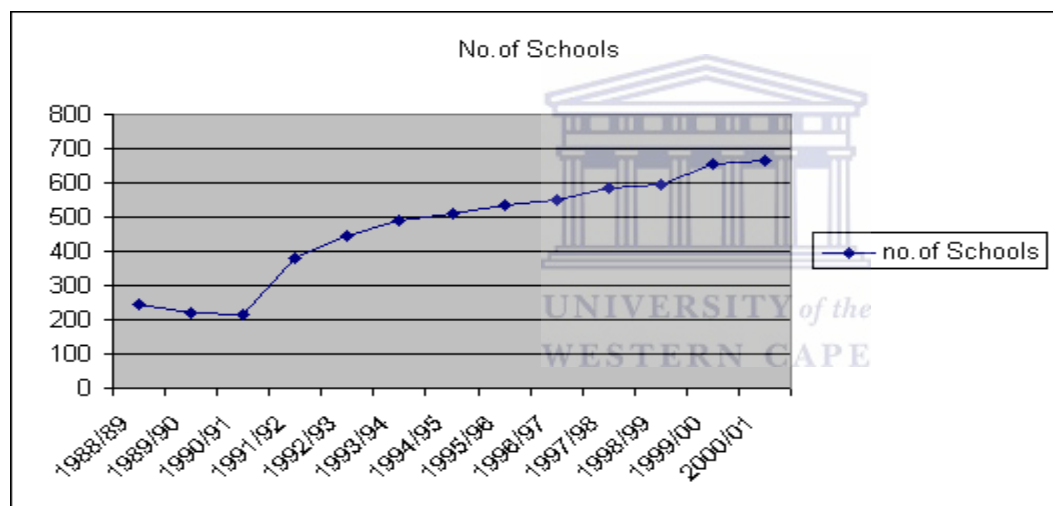
Furthermore, in order to encourage girls' enrolment in primary schools, the government gave priority to recruiting female teachers. It also tried as far as possible to make schools available to the majority of students within a walking distance, especially in places where people live in permanent settlements. As part of its strategy of improving female access to schooling, the MOE prepared a document, 'Eritrea: National Education Gender Policy and Strategic Framework of Action' (2004). This document which is part of the education reform process, calls for sensitising the community towards the benefits of female education. It called for reviewing the curriculum to make it more gender sensitive, and expanding the number of female teachers so that they could serve as role models for girls. Boarding schools for nomadic and semi-nomadic girls were also opened in order to encourage their school participation.

4.3.2. Expanding physical capacity

Immediately after independence the government of the State of Eritrea launched a massive primary school construction project in rural areas. The number of schools rose

up from 381 schools in 1991 to 667 schools in 2000/01. To increase equitable enrolment, cheap but durable classrooms and ancillary facilities such as teachers' accommodation were constructed in remote and formerly under-served areas. Similarly, to improve physical capacity, the education infrastructure was improved through the construction of additional classrooms at primary school level. Likewise, regional disparities in enrolment were addressed by targeting school construction in disadvantaged areas mainly through the application of a Geographic Information System (GIS) capability, which is used for school mapping and planning the distribution of schools across the country. Chart 4.1 below shows the steady growth of primary school construction in Eritrea.

Chart 4.1. Growth of primary schools in Eritrea 1991/92-2000/01



Source: Eritrea Basic Education Statistics 2003/04

The chart shows an overall steady increase in primary school growth between 1991/92 and 2000/01. The sharpest increase was between 1992 and 1993.

4.3.3. Decreasing repetition and improving efficiency

Repetition is an indicator of an internal inefficiency of an education system. It is a serious problem in Eritrean schools. Though the percentage of repeaters decreased from 25.5 percent in 1992/93 to 13.9 percent in 2000/01, more than 41,000 students repeated grades

in 2000/01 school year. These high repetition rates imply large inefficiencies in the system. Repeaters displaced other students who might have been in school.

To curb inefficiency, reduce repetition, and improve promotion, the MOE undertook a number of measures; i.e. it experimented with automatic promotion at primary school level, employed interactive or student centred pedagogies, improved teacher qualifications through pre-service and in-service teacher education, and introduced continuous follow-up and assessment (ESDP,2005: iv-v). As an outcome of these corrective measures the repetition rate decreased from 25.5 percent in 1992/93 to 13.9 percent in 2000/01 and promotion improved substantially. However, many teachers and parents I spoke to complain about the poor quality of education and blame the MOE's promotion policy for the decrease in quality.

4.3.4. Revising the curriculum and improving textbook production

As stated earlier in this chapter, the colonial curriculum did not address the needs and aspirations of the Eritrean people. Neither did the curriculum developed in 1982 by the Eritrean Peoples Liberation Front. It did not address the needs and interests of the contemporary Eritrean political and socio-economic contexts. Revising the curriculum and improving the production and delivery of teaching/learning materials were a prerequisite of the education reform process in the post independence period. In this regard, immediately after independence, the government of the state of Eritrea announced the introduction of a secular national curriculum. The MOE also announced a policy of using ethnic languages as the media of instruction at primary level. In order to rectify the mainly academic orientation of the school curriculum, the MOE developed a curriculum that is sufficiently broad and which prepares students for subsequent practical training. The curriculum emphasised the acquisition of literacy, numeracy, and problem solving skills, and attempted to integrate the subjects vertically and horizontally.

As indicated by an MOE report (2001:60) the Ministry, as part of its strategy of enhancing production and delivery of materials, had decide to set-up a curriculum

development division and a textbook production unit, with the aim of producing low-cost textbooks to distribute at a ratio of one textbook per pupil. Furthermore, in order to improve the physical quality of the textbooks, the MOE was committed to upgrading the hardware quality of its desk top publishing unit and trained printing and publishing personnel (MOE, 2001: 60). It also established a network structure and a book progress monitoring system. Similarly, production, costing, printing and distribution capacity were developed. A five year textbook production plan was also developed to direct the textbook development process (MOE, 2001: 60). In spite of all these commendable accomplishments, there is still enormous shortage of textbooks in schools, and as a result students are forced to share books with other students. There are many students who have to accomplish their schooling without textbooks (UNICEF Education Mission Report, 1997:3).

4.3.5. Training and supporting teachers

It was indicated earlier in this chapter that at independence Eritrea inherited an inadequate teaching force both in terms of quantity and qualifications. I also pointed out that following independence the teaching staff in Eritrea dropped by 52 percent as Ethiopian teachers left the system and went back home. Moreover, I mentioned that those directly recruited from high school by the Provisional Eritrean Government lacked training and experience. Hence, teacher training and support were major concerns of the Eritrean education reform orientation.

Consequently, in order to rapidly replace the departing teachers and meet rising demands, the MOE recruited about 1700 high school students, trained them for six weeks and deployed them in schools to teach (UNICEF, 1994:100). These newly recruited teachers were given an additional six weeks training in succeeding summers in order to qualify as primary school teachers. Furthermore, in order to improve teachers' qualification the MOE developed a local training system by organizing primary school teachers into 120 clusters, with the aim of improving their teaching methodology, and to introduce them to

continuous assessment methods, developing teaching aids, and adapting the curriculum to local contexts through experience sharing between clusters (MOE, 2001:55).

In an attempt to upgrade and improve primary school teachers' qualifications and get rid of unsuitable staff out of the system, the MOE retrenched 'burnt out' teachers through self-imposed restructuring programme. Similarly, the MOE offered secondary school completion courses to ex-combatants who were assigned as teachers. As pointed out by the MOE (2001:55-56), a two year distance education programme was developed to improve teachers' pedagogic skills and upgrade their academic qualifications. In order to ameliorate the teacher shortage a special training programme was arranged for teachers from minority ethnic groups. This programme produced more than 570 trained teachers (MOE, 2001:56). With financial assistance from UNICEF, the MOE introduced female teacher coaching programmes to consolidate the female role model factor across all communities.

4.3.6 Devolving the Ministry's functions and offices

The MOE dismantled and reorganized the education system it inherited from Ethiopia. As argued by Crosby (1996), reforming organizational structures provides an opportunity to develop new tasks, new procedures and new responsibilities. Some divisions and departments in the educational structure gained more importance while others were abolished altogether. With the intent of successfully implementing its education reform, the government of Eritrea changed the Ministry's configuration from the level of a provincial education office into a national education Ministry, and upgraded the district level education offices into regional education offices followed by sub-regional education offices.

The Ministry divided itself by function into the following departments: research and human resources development, general education and curriculum development, technical education and vocational training, and adult education and educational media. This functional division shows the Ministry's initial support for centralized system which

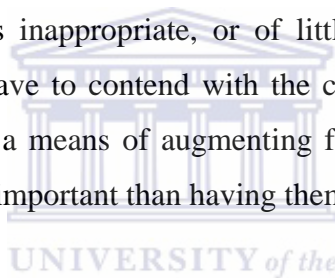
concentrates on recruiting, training and deployment, curriculum development and textbook production, and research and planning at national level. This was not unexpected as the MOE was a direct descendant of the EPLF which itself was a highly centralized command and control military organization. On the other hand, one can also assume that the shortage of qualified personnel meant that tight centralised control was required to facilitate effective delivery at regional and sub-regional level.

After a while the government shifted to a decentralized model by dividing the country administratively into semi-autonomous regions. It is difficult to tell for sure what prompted the government to decentralize, but one can speculate that it may be because it wanted to follow the global trend or may be it genuinely wanted to pave the ground for effective and efficient collective public administration. This educational decentralization in principle entailed transferring of decision-making authority to regional education office level. The aim of the education decentralization as outlined in the draft National Education Policy (2003:12-13) was to distribute power and authority, enhance efficiency and improve delivery. Thus, technically the MOE's central office was only responsible for developing policies and guidelines, curriculum development, and the training of teachers. All other activities were devolved to the regions.

As indicated in the preceding section, the MOE took laudable steps towards reforming its education system. It used targeted interventions to increase school access for the marginalized sections of the population. It expanded the physical capacity of the education system to reach formerly underserved regions and sections of the population. Similarly, it took major steps to improve efficiency and decrease repetition, revise its primary school curriculum and improve textbook production and the delivery and training and support of teachers. However, like all reform initiatives, reform in this country encountered a number of constraints. In the next section, I discuss some of the major constraints that impacted on these education reform initiatives.

4.4 Constraints in implementing Eritrean educational reforms

Efforts to expand and equalize education opportunities have faced many constraints. According to Farrell (1992:114), the most obvious and frequent one is a lack of financial, physical and human resources, followed by geographic and democratic conditions that include vast distances, a low-density population spread, a harsh environment, and poor communication which makes the construction of schools, the supply of textbooks and equipments difficult. Another set of constraints arises out of the cultural and socio-political characteristics of the country. Sometimes cultural factors that restrict the enrolment of females frustrate reforms. In addition to these mostly supply side⁶ constraints; there are also demand side⁷ factors that input on educational expansion and equalization. One very complex demand side factor is parental views that regard the education provided to their children as inappropriate, or of little use to the family's survival. Efforts to expand schooling have to contend with the community's perceived usefulness of their children's labour as a means of augmenting family income. Having children work is often regarded as more important than having them attend school.



Reforms are constrained for a variety of other reasons. According to Sutton (1999:18), people react negatively to change for fear of the unknown, lack of information, threat to status, and fear of failure. Fullan (1991) notes that implementation is affected due to the change itself, to the setting where implementation is to occur, and to the wider context. In analyzing educational reforms, Havelock and Huberman (1977:15) concluded that inadequate planning and failing to take into account the nature of the system into which the change is being introduced are serious barriers to reform.

In this section of the chapter, I examine some of the reasons that constrained implementation of the envisaged educational reforms based on MOE's annual education evaluation reports and yearly educational statistics and abstracts. I also use UNICEF's

⁶ Supply side factors (educational factors) include shortage of schools, overcrowded classrooms, lack of female teachers, lack of trained teachers, lack of sanitation facilities, excessive distances to school, low curriculum relevance and inadequate supplies of learning materials.

⁷ Demand side factors (environmental factors) include general poverty, direct and indirect costs, long distances to school, social and cultural obstacles, early marriage, low schooling perception etc.

and UNESCO's education country reports, various education mission reports and the World Bank's education reports on Eritrea to explore reform impediments.

The reforms that aimed at increasing school access for poor, rural children and girls, and expanding physical capacity have been described as overambitious and difficult to implement, when taking the country's limited financial and human resources into consideration. As noted earlier, Eritrea is one of the poorest countries in the world, ranking 155th out of 175 in the UNDP (Human Development Index 2003). Secondly, reform is impeded as the country is still in a post war reconstruction phase and by the on going war over border with Ethiopia (UNICEF, 1997:4).

Another education reform implementation constraining factor is the use of mother tongue as medium of instruction. Many of the languages were not written languages until recently and did not have much written materials. Shortage of adequate teachers to teach in the various mother tongue languages is a huge constraint in providing access (UNICEF, 1997:5). The issue of language in education policy and its effects in educational access will be discussed in the next chapter when I focus on ethno-regional disparities in primary schooling in Eritrea. In addition, population habitation patterns, and community attitudes towards education in the lowland areas posed major challenges in implementing access reforms.

Expanding the physical capacity of the education system by the current standard model primary schools and trained teachers has proven to be logistically and financially unfeasible. As there is little cost sharing with the private sector in education in Eritrea, the government has had to shoulder all cost for school expansion which proved to be a task beyond its financial and logistical capacity. The high cost of construction of a classroom which is in excess of US\$ 35,000 has been a crucial inhibiting factor in expanding access (World Bank report 2003:10).

Reforming regional, ethnic and gender disparities in education have to navigate tough political and administrative terrain. The state of gender inequity in education is

practically external to the school system and is strongly related to prevailing socio-economic environment, and is thus very problematic. The gender inequity in the Eritrean education system has as much to do with how parents see education as with educational supply factors. In the lowland areas where there are huge disparities between boys' and girls' enrolment, "parents see education as either irrelevant or as a barrier to achieving the goals and aspirations which they have for their daughters—i.e., to marry and perpetuate the cultural tradition" (Kane, 1996:24). Pertaining to inequity by region, it can be said that the prevailing shortage of schools, community attitudes towards education, and the presence of difficult-to-reach populations in most of the lowland regions, make implementing regional reforms arduous.

It is difficult to implement efficiency driven reforms given the prevailing quality of learning materials, teacher skills and the learning environment. Improving wastage from dropouts and repetition is difficult because of the uncondusive teaching and learning environments in many schools and the absence of learning materials. As the UNICEF report (1997:3) shows, Eritrean children rarely have "textbooks of their own; a book is often shared by 5 to 10 children in primary schools." Equally, due to comparatively small number of learning hours of about 700 hours per year and insufficient time-on-task by teachers, it is hard to improve students' low achievements.

According to many school directors and supervisors I spoke to, many schools start two to three weeks later than the actual school calendar because of teachers not appearing at their places of work on time. Parents and students complain about teachers disappearing for weeks during the many religious and national holidays. In addition, Eritrean children are burdened with having to learn three or four languages, presented in three different scripts. The UNICEF Education Mission has this to say with regard to this issue:

The pedagogically sound government policy on use of the mother-tongue as a language of instruction has led to the children of minority ethnic groups learning up to four languages and up to three different alphabet scripts at a very early age in life. This burden of multiple languages taking up more than 50 percent of the teaching time adversely affects children's achievements and contributes to high repetition and dropout rates (UNICEF Education Mission Report, 1997: iv).

The overloaded nature of the curriculum, lack of textbooks, and non-availability of teachers' guides and overcrowded classrooms and the didactic teaching approaches practiced by Eritrean teachers has had a negative effect on the implementation and outcome of educational reforms.

We have seen that decentralisation involves the transfer of decision-making authority from the central government or Ministry to outer-layers or units. This transfer of power, authority and resources challenges vested interests of some bureaucrats, causing resentment in some quarters. Educational decentralisation was decreed in 1996 as part of the country's overall political and administrative decentralisation at that time. It has not yet been fully implemented. This may be because of a shortage of qualified and experienced staff at all levels as the Ministry always selects from a limited pool of ex-freedom fighter to staff its higher posts, or for political and economic reasons. With regard to the MOE's shortage of qualified staff, the UNICEF (1997:12) observed that although the Ministry has qualified personnel at the highest levels of the administrative echelons, it lacked qualified personnel at middle levels to fill the leadership posts in order to effectively implement its decentralization policy. Arguably, these factors hampered the effective decentralisation of the education system.

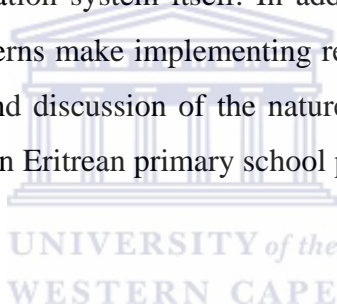
4.5 Conclusion

This chapter provided an understanding of the nature and impact of educational reforms in Eritrea. The first section of the chapter gave a brief outline of the current state of primary school provision (1992-2001) in order to comprehend the motives for the Eritrean education reform. The analysis produced a broad picture of how disparate the Eritrean education system is in terms of region, ethnicity and gender. It also revealed the inefficiency of the school system.

The second section of the chapter, discussed the government's efforts to reform education with the view of understanding how it addressed the numerous challenges the system faced. The section showed how the government enhanced girls' participation through

sensitisation programmes, the use of female teachers and financial and non-financial incentives. It also revealed how the government improved physical capacity through the construction of new schools and additional classroom. Moreover, the section showed how the government tried to improve quality of education by recruiting and training more teachers and organising them into clusters to improve their pedagogic skills.

The third section explored the major constraints that hampered the effective implementation of the education reform initiative using data from MOE's annual education evaluation reports and yearly educational statistics and abstracts. The section also employed data produced by UNICEF and the World Bank country offices. This section showed the difficulties experienced when implementing physical capacity expansion. It also showed that reforming gender disparity has as much to do with how parents see education as with the education system itself. In addition, it revealed how community attitudes and habitation patterns make implementing reforms difficult. In the next chapter I provide a presentation and discussion of the nature and extent of ethno-regionally based educational disparities in Eritrean primary school provision.



Chapter Five: Ethno-regional disparities in primary school access in Eritrea

5.1. Introduction

As referred to earlier in the introduction to chapter four in the thesis, Eritrea inherited an education system which was unevenly distributed in terms of region and linguistic groupings from its colonial past. I also argued elsewhere in the thesis (see chapter 3, section 4) that the differential access to basic services such as education during the colonial period contributed to widening regional inequalities. In addition, I noted that because of the colonial mode of rule, inequalities evolved along ethnic lines. Hence, the roots of ethno regional educational disparities in Eritrea are deeply embedded in the colonial situation, and educational provision in recent years has accentuated these divisions.

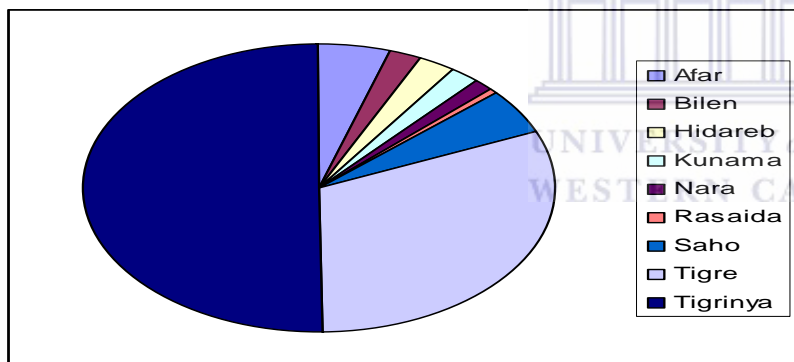
Physiographically, Eritrea is broadly divided into the central highlands, the eastern lowlands (costal plains) and the western lowlands. In the past the country was divided into nine provinces more or less on a strict ethnic, cultural and linguistic basis. After independence in 1991, however, the Government of Eritrea modified the earlier provincial divisions and divided the country into six administrative regions, namely: Anseba, Debub, Southern Red Sea, Gash Barka, Maekel, and Northern Red Sea. The government had redrawn the administrative regions in an attempt for them not to coincide with cultural, linguistic, or ethnic divisions in the population. Despite these modifications, Eritrean regions still remain predominantly populated by one or two ethnic, cultural or linguistic groups.

Eritrea has a population of about 3.6 million evenly divided between adherents of the Islamic and Christian faiths. It is composed of nine culturally and linguistically distinct ethnic groups that speak nine different languages and use three different scripts. These groups each have distinct ethno-linguistic divisions that have created their solid ethnic identities. In addition, each of these groups inhabits a particular territory and ethnic

members share a common ancestry, language and culture. As a result, each and every part of the country is historically associated with a particular ethnic group. About 80 percent of the Eritrean population live in rural areas.

According to ERREC (cited in UNICEF, 1994:12) the two main ethnic groups, the Tigrinya and Tigre, make up 81 percent of the population; i.e. 50 percent and 31 percent of the total population respectively. The other seven ethnic groups make up the remaining 19 percent i.e. Afar and Saho 5 percent each, Hidareb 2.5 percent, Bilen 2.1 percent, Kunama 2.0 percent, Nara 1.5 percent and Rashaida 0.5 percent. However, as no national census has been conducted in Eritrea so far, the statistics may be skewed for political or other reasons, therefore, one has to be cautious with these population figures. Chart 5.1 below provides Eritrean ethnic population estimates.

Chart 5.1: Ethnic population estimates



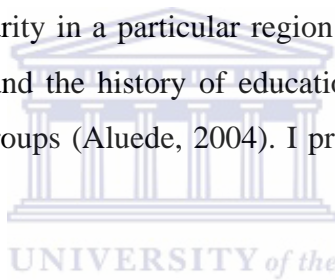
Source: UNICEF, 1994:12

These ethnic and linguistic groups live in different regions and sometimes make up ethnic pockets within a region. Ethnicity in Eritrea coincides with language to the extent that the name of the language and ethnic group are the same. Each ethnic group has a different level of development and exposure to missionary and colonial experiences. As indicated by Carron and Chau (1981:68) access is affected by physical accessibility which is organized on a territorial basis.

Each of Eritrea's six regions is in a different developmental and economic stage and overlap with ethnic and religious divisions. In chapter two (section 4), I indicated that

regional disparity in education mirrors the inherent inequalities within the regions and these will be compounded when geographical and regional inequalities coincide with ethnic and religious divisions. Educational disparities represent differences in educational opportunities and outcomes among two or more groups and are observed most often among groups that embody characteristics associated with societal advantage and disadvantage, which include race and ethnicity, socio-economic status, gender, and geographic location.

In terms of educational provision, during colonial times the regions and ethnic groups were treated unequally. As indicated in chapter three, colonialism and missionary activities affected the Eritrean regions differently. Colonially-based educational activities were mostly geographically limited to the coastal and urban areas. Therefore, in order to explain the causes for educational disparity in a particular region or among a particular ethnic group it is important to understand the history of educational development in a country and among its various ethnic groups (Aluede, 2004). I provided a discussion of this background in chapter three.



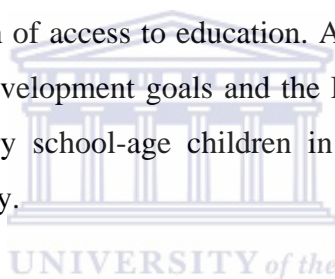
In this chapter, I explore the contours of ethno-regional disparities in primary school access in Eritrea by focusing on primary schooling in regional context. The chapter comprises five sections. The first section paints a canvas of the prevailing state of primary school provision in the country. The second section investigates primary school disparities by region. Section three of the chapter looks into the extent of primary school access disparities at the intra-region level. Section four of the chapter discusses ethno-linguistic disparities in the Eritrean primary school provision. The fifth section surveys the major causes for ethno-regional disparities in primary school provision in the country. The conclusion pulls these together to give a full picture of the state of primary school provision in the country.

5.2 The state of primary school access in Eritrea: An overview

This section of the chapter describes the state of Eritrean primary school provision after independence in 1991. Its main focus is on primary school provision in terms of number

of schools, and enrolment by region, by gender and by ethnicity/language. (*In this thesis gross enrolment rate (GER) denotes the total enrolment in primary school, regardless of age, in a given year, and net enrolment rate (NER) denotes the ratio of official school-age children enrolled in primary school to the total population of children of official primary school age, as defined by the national education system.*) The purpose of this section is to provide a backdrop for the analysis of ethno-regional disparities in the Eritrean primary school provision, which is the core aim of the chapter.

The Eritrean government has long accepted that basic education is both a necessity and a fundamental human right. It endorsed all regional and international proclamations and approaches to provide basic education for all. It took part in the 1999 Sub-Saharan Conference on Education for African Renaissance and the 2000 Dakar Declaration all of which are efforts towards the realization of access to education. As explained in chapter four, it also adopted the Millennium Development goals and the Dakar Declaration that call for the participation of all primary school-age children in free schooling of an acceptable quality based on gender equity.



The government of Eritrea introduced a set of educational policies designed to give wide access to education to the Eritrean population. The government's policy of widening access to basic education was partly in order to enhance its credibility, advance its own legitimacy and also to reduce the disparities and inequalities inherited from the various colonial governments. Consequently, it abolished Amharic, an Ethiopian language used as a medium of instruction in Eritrean primary schools. In its place Eritrean ethnic languages were introduced as media of instruction in primary schools. Moreover, in terms of educational policy, priority was given to rural areas, formerly underserved regions, ethnic groups and girls, and primary schooling became formally compulsory.

This policy of giving priority to rural areas and formerly underserved regions, ethnic groups and girls made an immediate and major impact on educational development. For example, since 1992 the state of Eritrea has made impressive gains in educational development. Primary enrolments increased from around 150,982 students in 1991/92 to

about 298,691 students in 2000/01 an increase of 97.8 percent. The number of primary schools increased from 381 to 667 for the same period, an increase of about 75 percent. At the junior secondary school level enrolment increased from about 27,917 students to about 76,564 students, an increase of about 173.5 percent over the same period, and the number of junior secondary schools went up from 65 to 142, an increase of 118.5 percent.

As indicated in chapter 4, (section 2.2), immediately after independence the government of the state of Eritrea launched a massive primary school construction project in rural areas and introduced a shift system in major cities and towns. Moreover, in order to address the primary school demands of the population the government embarked upon a primary school teachers' recruitment drive. In addition, in order to encourage parents to send their girl children to school, the government introduced an inducement programme in terms of which they offered scholarship to needy students. It also introduced a school feeding programme in rural areas to help poor households. The government also gave priority to recruiting female teachers and as much as possible made schools available to the majority of students within walking distance in areas where people live in permanent settlements.

Despite these efforts, hundreds of thousands of school-age children in Eritrea still failed to gain access to primary schooling and large numbers of those children who did enrol left prematurely, dropping out before they complete primary education. Table 5.1 below depicts the low Eritrean primary school enrolment rate at present.

Table 5.1. Primary level gross enrolment rate 1991/92-2000/01

	Population 7-11			Enrolment in elementary level			Gross enrolment ratio %		
	T	M	F	T	M	F	T	M	F
1991/92	416,275	211,239	205,036	150,982	81,746	69,236	36.3	38.7	33.8
1992/93	427,515	216,943	210,572	184,656	102,235	82,421	43.2	47.1	39.1
1993/94	439,057	222,800	216,257	208,199	115,663	92,536	47.4	51.9	42.8
1994/95	450,911	228,816	222,095	224,287	124,544	99,743	49.7	54.4	44.9
1995/96	463,086	234,993	228,093	241,725	133,471	108,254	52.2	56.8	47.5
1996/97	475,589	241,338	234,252	240,737	132,250	108,487	50.6	54.8	46.3
1997/98	488,430	247,854	240,577	247,499	135,569	111,930	50.6	54.7	46.5
1998/99	501,618	254,546	247,072	261,963	143,578	118,385	52.2	56.4	47.9
1999/00	515,162	261,419	253,743	295,941	162,896	133,045	57.5	62.3	52.4
2000/01	529,071	268,477	260,594	298,691	164,523	134,168	56.6	61.2	51.5

Source: Eritrea: Essential Education Indicators 2000/01

As is illustrated in Table 5.1 above, despite the massive increase in enrolment between 1991/92 and 2000/01 43.4 percent of school-age children are still out of school. With regard to the enrolment of girls, there was an increase of 17.7 percent between 1991/92 and 2000/01. However, 49.5 percent of all school-age girls are still out of school. With respect to boys 38.8 percent have no access to primary schooling as yet. From this, we can conclude that primary schooling access in Eritrea is still very low and that girls suffer considerably from inequitable access. If we look into the net enrolment ratio in Table 5.2 below, the picture is more dismal.

Table 5. 2. Primary level net enrolment and out of school children 1991/92-2000/01

Year	Population 7-11			Net enrolment 7-11			%	Number of children out of school 7-11			% out of school 7-11 years
	T	M	F	T	M	F		T	M	F	
91/92	416,275	211,239	205,036	93,087	48,397	44,690	22.4	323,188	162,842	160,346	77.6
92/93	427,515	216,943	210,572	109,111	57,126	51,985	25.5	318,404	159,817	158,587	74.5
93/94	439,057	222,800	216,257	113,612	59,645	53,967	25.9	325,445	163,155	162,290	74.1
94/95	450,911	228,816	222,095	122,084	64,098	57,986	27.1	328,827	164,718	164,109	72.9
95/96	463,086	234,993	228,093	133,496	69,958	63,538	28.8	329,590	165,035	164,555	71.2
96/97	475,589	241,338	234,252	136,943	72,073	64,870	28.8	338,646	169,265	169,382	71.2
97/98	488,430	247,854	240,577	150,751	80,212	70,539	30.9	337,680	167,642	170,038	69.1
98/99	501,618	254,546	247,072	166,879	89,556	77,323	33.3	334,829	164,990	169,749	66.7
99/00	515,162	261,419	253,743	194,963	104,748	90,215	37.8	320199	156,671	163,528	62.2
00/01	529,071	268,477	260,594	205,831	111,022	94,809	38.9	323,240	157,455	165,785	61.1

Source: Eritrea: Essential Education Indicators 2000/01

In 1991/92 the net enrolment ratio (NER) at primary school level was 22.4 percent. This figure climbed to 38.9 percent in 2000/01, an increase of 16.5 percentage points. The percentage of out of school children went down from 77.6 percent to 61.1 percent for the same period. However, despite the decrease in the percentage of those who had no access to primary schooling between 1991/92 and 2000/01 there were 323,249 school-age children between the ages of 7-11 in 2000/01 who had no access to primary schools. Out of these 165,785 were girls. This shows that there is marked access disparity to primary schooling between boys and girls in Eritrea. Table 5.3 below shows net enrolment disparity in primary school between boys and girls.

Table 5.3. Primary level net enrolment and net enrolment ratio by gender 1991/92-2000/01

Year	Population 7-11			Net enrolment in elementary level			Net enrolment ratio %		
	T	M	F	T	M	F	T	M	F
1991/92	416,275	211,239	205,036	93,087	48,397	44,690	22.4	22.9	21.8
1992/93	427,515	216,943	210,572	109,111	57,126	51,985	25.8	27.0	24.7
1993/94	439,057	222,800	216,257	113,612	59,645	53,967	25.9	26.8	25.0
1994/95	450,911	228,816	222,095	122,084	64,098	57,986	27.1	28.0	26.1
1995/96	463,086	234,993	228,093	133,496	69,958	63,538	28.8	29.8	27.9
1996/97	475,589	241,338	234,252	136,943	72,073	64,870	28.8	29.9	27.9
1997/98	488,430	247,854	240,577	150,751	80,212	70,539	30.9	32.4	29.3
1998/99	501,618	254,546	247,072	166,879	89,556	77,323	33.3	35.2	31.3
1999/00	515,162	261,419	253,743	194,963	104,748	90,215	37.8	40.1	35.6
2000/01	529,071	268,477	260,594	205,831	111,022	94,809	38.9	41.4	36.4

Source: Eritrea: Essential Education Indicators 2000/01

The NER disparity between boys and girls in 1991/92 was only 1.1 percent. In 2000/01 the NER disparity between boys and girls went up to 5 percent. This shows that despite the increase in enrolment for girls the net enrolment disparity between boys and girls has been increasing. This statistics reveals a worrying increase in gender inequity in primary school provision in Eritrea. The reasons for this disparity may be the higher opportunity cost of sending girls to school at the primary level, the perceived lower returns of sending daughters compared to sons, and the strong customary or traditional attitudes that constrain or restrict girls' schooling in comparison with boys. As argued by Herz et al (1991), by sending girls to school, the family loses income that the girl might have earned. Moreover, since the value of girls' education in traditional societies like Eritrea is often measured in terms of increased productivity and earning capacity, education that does not prepare girls to be better producers at home is commonly not highly valued (Kelly 1987 and Teitjen 1991). Moore (1996) contends that in societies where girls marry and bear children in their early teens, significant investments in their education are considered unnecessary (Moore 1996). In a research study on girls' education in Eritrea Kane (1996: 54), found that many parents feel that it is hardly worth the trouble to send a girl to school since she will leave within a few years after entry.

While these are very important reasons for lower girls' enrolment, the major constraints in Eritrea, according to Kane (1996, 16-24), are religious and cultural. Kane argues that the major reasons for lower girls' enrolment are the low priority of education in general,

low priority of girls' education in particular, and fears about the loss of girls' traditional values (respect, obedience, and virtue), which may lead to their reduced marriageability. Similarly, ill health and malnutrition impede girls' enrolment and survival in school. Kane (1996) notes that religion, ethnicity and urban influences significantly affected girls' enrolment patterns. For example, according to the study conducted by Kane, only 36 percent of Eritrean Muslim girls were in school. In contrast, 80 percent of school-aged girls from Orthodox Christians and Catholic families were in school. Kane's study further discloses that the Tigrinya and Bilen ethnic communities send a greater percentage of their girls to attend school compared to the other groups (Kane, 1996:23). Ethnic communities that rank low in sending their girls to school are the Saho 27 percent, Nara 29 percent, and Tigre 34 percent. This can be attributed to the various infrastructural, educational, economic, socio-cultural and political barriers to schooling that these ethnic minorities have to deal with.

It can be concluded that despite the government's highly impressive effort to expand primary school access and its policy of prioritising the rural areas, formerly underserved regions, ethnic groups and girls, access to Eritrean primary school is still very low and is highly skewed in terms of gender. The difference between gross enrolment ratios and net enrolment ratios also show that a very high number of school-age children did not receive schooling. In the next section I discuss regional disparities in primary school access in Eritrea.

5.3. Regional disparities in Eritrean primary school access

In this section of the chapter I analyse inter-regional primary school access disparities by looking into the number of schools by region, and gross and net enrolments by region and by gender. In chapter two (section 4) of this thesis, I indicated that regional disparities in education mirror the inherent inequalities within societies. They are manifestations of inequalities in the structure of the societies and are compounded when they coincide with ethnic, linguistic and religious divisions. Ethno-regional disparities in education stem from the manner in which societies were constructed over years of their history. I also

noted elsewhere (see chapter 2, section 4) that skewed educational opportunities and outcomes are observed most often among groups that embody characteristics associated with societal disadvantages such as those based on race, ethnicity and geographic location, among others. Farrell (1992:110) argues that in developing countries the “salient constraints upon a child’s life chances are his parents’ ethnic or tribal group, or their lineage or the geographic region of origin.”

I mentioned in chapter three that educational provision in Eritrea was historically inequitable, privileging highlands over lowlands and urban areas over rural areas. I also indicated that during the Italian and the subsequent colonial periods, regions that were not suited for commercial agriculture as well as regions that were not located near the centre of colonial commerce, were deprived of educational investment. This trend of favouring the core regions still persists in Eritrea. This may be because of the government’s lack of capacity to meet the huge demand of those who remain outside the core regions or because of indifference towards the peripheral regions by politicians and policy-makers. It may also be because of relatively higher unit costs of schools that are under-utilised in remoter regions or the higher input prices of the education sectors of some regions compared to others. This trend of favouring the core regions created educational inequalities between and within regions and between urban areas and rural areas. Thus, to understand the extent of ethno-regional disparities in primary education access in Eritrea, it is critical to look into the current state of primary education development.

Disparities in education take different forms. In most developing countries, it is regional and ethno-linguistic disparity that constitutes the most visible inequality. As indicated in the introduction to this chapter, Eritrea is divided into six administrative regions, two in the highlands, two in the eastern lowlands (coastal plains), and two in the western lowlands. The two highland regions are predominantly populated by the Tigrinya ethnic group who is mainly Christians. The western lowland regions are predominantly Muslim and are inhabited by a number of minority ethnic groups. The Nara and Kunama ethnic groups are mostly confined to the western lowland region. The Bilen ethnic group lives entirely in the Anseba region. The coastal lowland regions are inhabited mainly by the

Afar, Tigre and Saho ethnic groups who are followers of the Islamic faith. This picture provides some indication of the complexities of education provision in a multi-ethnic, multi-lingual and multi- religious countries like Eritrea. Table 5.4 below, shows the number of primary schools and gross primary school level enrolments by region.

Table 5.4. Number of primary schools and gross enrolment ratios by region 2000/01

Region	Number of School	Population age 7-11	Gross enrolment	Gross enrolment ratio	Non-enrolled	%
Anseba	110	78,844	45,249	57.7	33,595	42.3
S.R.Sea	24	37,109	3,626	9.8	33,483	91.2
Debub	214	137,479	101,438	73.8	36,041	26.2
Gashbarka	132	100,896	50,295	49.8	50,601	50.2
Maekel	108	98,299	75,858	77.2	22,441	22.8
N.R.Sea	79	76,843	22,225	28.9	56,618	71.1
Total	667	529,071	298,691	56.5	23038	43.5

Source: MOE (2001) Essential Education Indicators 2000/01

Table 5.4 above shows that there is wide gap in gross enrolment between the regions, and particularly between the highland and the lowland regions. The two highland regions of Debub and Maekel together comprise only 44.6 percent of primary school-age children. Despite this, they have 59.4 percent of all primary school enrolment in the country, and 48.3 percent of the primary schools. There is also a huge difference in enrolment between individual regions. For example, primary school enrolment in the Maekel region is 77.2 percent while that of the Northern Red Sea region is merely 28.9 percent. Also, there is a big difference between the Debub region with 73.8 percent enrolment and the Southern Red Sea region with only 9.8 percent.

Again, if we look into the deviation from the national average, the three lowland regions are below the national average with the Northern Red Sea and Southern Red Sea regions having a deviation of -27.6 and -46.7 percent below the national average respectively. The two highland regions of Debub and Maekel, however, have a deviation above the national average of 17.3 and 20.7 percent respectively. From these deviations we can discern that

provision of primary schooling in Eritrea is skewed in favour of the two highland regions. If we look further into net enrolment by region the picture becomes more alarming as the disparities are very substantial. Table 5.5 demonstrates the considerable disparities in primary school access by region by looking into the net enrolment.

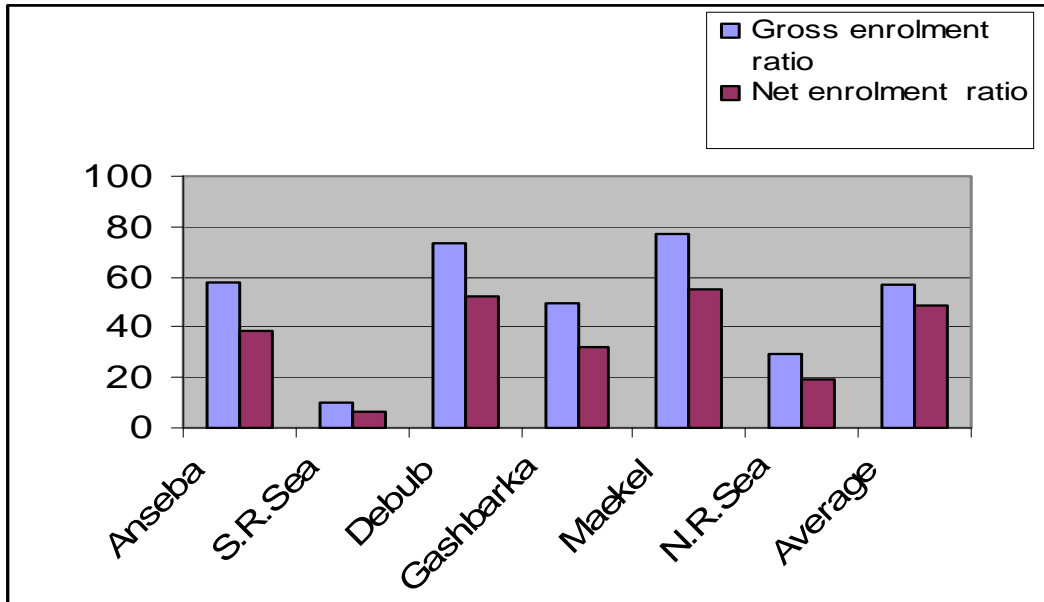
Table 5.5. Primary school net enrolment and deviation by region 2000/01

Region	Population age 7-11	Net enrolment	Net enrolment ratio	Deviation from national average
Anseba	78,844	29,997	38.2	-0.7
S.R.Sea	37,109	2,439	6.6	-32.3
Dehub	137,479	71,429	52.0	13.1
Gashbarka	100,896	32,361	32.1	-6.8
Maekel	98,299	54,493	55.4	16.5
N.R.Sea	76,843	15,048	19.6	-19.3
Total	529,071	205,831	38.9	

Source: Eritrea, Essential Education Indicators 2000/01

Table 5.5 portrays the large disparities in primary school access between the regions. If we look into the deviation from the national average for the three lowland regions of Southern Red Sea, Northern Red and Gash Barka, it is -32.3, -19.3 and -6.8 respectively. On the other hand, if we look into the two highland regions of Maekel and Dehub they have a deviation of 16.3 and 13.1 percentage points above the national average. This illustrates the massive disparities in access to primary schooling between the highland and lowland regions as a cause for concern. Chart 5.1 below compares primary school level gross and net enrolment by region for the period 2000/01.

Chart 5.2 Gross and net primary school enrolment 2000/01



Source: Eritrea, Essential Education Indicators 2000/01

These regional averages like that of the national averages mask huge disparities at intra-region level. In the next section I explore the disparities at intra-region level by taking only two regions as illustrative example; they are the Northern Red Sea and the Anseba regions. The choice of these two regions as a focus on intra-regional disparity was based on the fact that each of them has at least four ethnic groups, they are rurally-based with many nomadic populations. The other regions were excluded from the intra-regional analysis because the two regions of Maekel and Southern Red Sea are homogenous in ethnicity while the Debub region is populated by only two ethnic groups. Therefore, they are not germane for consideration for intra-regional disparities in educational provision.

5. 4. Intra-regional disparities in Eritrean primary school access

Eritrea is divided into 6 regions, 58 sub-regions, 701 administrative areas and 2,606 villages (Ministry of Local Government, 2001). Eritrea only had 667 primary schools by the 2000/01 academic year. There are 34 administrative areas without a primary school. If we compare the number of villages and the number of primary schools and divide the number of schools by the number of villages, a school on average has to serve about four villages. In the highland regions of Eritrea, villages are so close together that even if there

is no school in a village one can get a school within a walking distance, and as the weather is mild a primary school child can walk to a school in a neighbouring village without a problem, provided there is a place in the school for the child. In contrast to the highland regions, the lowland regions of Eritrea are very big in size, sparsely populated, and villages are far apart. Therefore, unless there is a school in a village, there is no way that a child can attend a school in a nearby village. I now go on to analyse intra-regional disparities in primary school provision in the Northern Red Sea and Anseba regions respectively. As I explained in the previous section, I choose these regions because of their ethnic heterogeneity.

5.4.1 Intra-regional disparities in primary school access in the Northern Red Sea region

The Northern Red Sea region is made up of ten sub-regions, 93 administrative areas and 330 villages. There were 79 primary schools in the region by 2000/01 which means that the number of schools is less than the number of the administrative regions. As a result, some administrative regions had to do without a school. There is about one school for every four villages. Table 5.6 below depicts the realities of educational disparities within the Northern Red sea region.

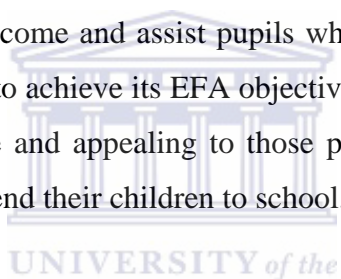
Table 5.6. Intra- regional disparities in primary school provision in the Northern Red Sea region 2000/01

Sub-regions	7-11 population	year	Enrolled	%	Schools	Non-enrolled	%	Deviation from regional average
Gelalo	12,614		1,188	9.4	12	14,426	90.6	-19
Foro	7,234		1,636	22.6	10	5,598	77.4	-5.8
Ghinda	9,687		6,890	71.1	18	2,797	28.9	+42.7
Shieb	8,287		1,997	24	5	6,290	76	-4.4
Massawa	5,373		3,747	69.7	10	1,626	30.3	+41.3
Dahlak	460		286	62.1	5	174	37.9	+33.7
Afabet	15,754		3,212	20.4	7	12,542	79.6	-8
Nakfa	8,326		2,630	31.6	8	5,696	68.4	+3.2
Karura	6,699		475	7.1	2	6,224	92.9	-21.3
Adobaha	3,641		164	4.5	2	3,477	95.5	-23.9
Total	78,225		22,225	28.4	79	55,850	71.6	

Source: MOE (2001) Essential education Indicators 2000/01

From Table 5.6 above we observe that the regional average of 28.4 in the Northern Red Sea region hides marked intra-regional disparities. Six out of the ten sub-regions have a negative deviation from the regional average. Adobaha, Karura and Gelalo sub-regions have only 4.5, 7.1 and 9.4 percent of primary school enrolment respectively. This is far below the regional average of 28.4. These sub-regions are inhabited by the Hidareb and the Afar ethnic groups who are Muslims, thus, the sub-regional educational disparities overlap with ethnic and religious disparities. From the table, we observe that the gap between the highest enrolment of 71.1 percent for Ghinda and the lowest of 4.5 percent for Adobaha is 66.6 percent. The two sub-regions with the highest enrolments are actually urban and peri-urban. They also have a mixed population in terms of ethnicity, religion, and language. They are also relatively well off economically in relation to the other sub-regions, and have longstanding exposure to education. This tells us that there are disparities between urban and rural areas, between poor and relatively well-off sub-regions, and between ethnically homogenous and ethnically mixed sub-regions in the region. Moreover, Table 5.6 shows that the two sub-regions with the lowest enrolment are the remotest, with limited community infrastructure, little exposure to education, rugged terrain, harsh climatic conditions, and scattered settlement patterns.

Similarly, Table 5.6 shows that schools are inequitably distributed between sub-regions, and are under-utilised. This reflects an inefficient use of resources, low demand for education and poor school mapping. In general, according to the MOE (2001), most primary schools in the Eritrean lowland areas are under-utilised. In the rural areas, 36.7 percent of primary schools have a student population of less than 250, and another 33 percent have a student population of between 250 and 500. Thus, roughly 70 percent of primary schools in Eritrea are working below capacity. In the Northern Red Sea region the average school to pupil ratio is 1: 281, which is well below what a standard primary school can accommodate. And in certain sub-regions the school to pupil ratio is 1: 99, while that of the Dahalak sub-region is 1: 57. The disparities between sub-regions are thus considerable. It can be construed from the above data that schools should not only provide places, but they have to reach out to welcome and assist pupils who, for various reasons find it difficult to attend school. In order to achieve its EFA objectives the government has to make primary schools more attractive and appealing to those parts of the population that are being asked for the first time to send their children to school.



Generally speaking, 71.6 percent of all primary school-age children in the Northern Red Sea region are not in school. In three sub-regions namely, Gelalo, Karura and Aobaha 90.6 percent 92.9 percent and 95.5 percent of all primary school-age children are not in school respectively. And in Foro and Afabet sub-regions the non-enrolment percentages are 77.4 percent and 79.6 percent respectively. Even in the three sub-regions with relatively high enrolment, about one third of eligible primary school-age children are not in school. This shows that access is very limited in the region in general, and educational opportunities are not equitably distributed between the different sub-regions. This may be due to the region's sparse population density, scattered settlement patterns, poor school planning on the part of the MOE and little prior exposure to education. In the next sub-section I analyse intra-regional primary school educational disparities in the Anseba region.

5.4.2 Intra-regional disparities in primary school access in the Anseba region

The Anseba region is divided into eleven sub-regions, 102 administrative areas and 425 villages. Four ethnic groups live in the region, and primary education is given in five languages and three scripts. Table 5.7 below shows primary school provision at sub-regional level in the Anseba region.

Table 5.7. Intra- regional disparities in primary school provision in the Anseba region 2000/01

Sub region	7-11 years	Enrollment	%	Deviation	Schools
Aditekelezan	4,944	3,978	80.5	+11.7	9
Asmat	5,319	2,004	37.7	-31.1	6
Elabered	6,698	6,830	102	+33.2	22
Gheleb	5,241	3,501	66.8	-2	8
Habero	7,077	2,481	35.1	-33.7	6
Hagaz	9,781	7,224	73.9	+5.1	18
Halhal	3,961	3,138	79.2	+10.4	8
Hamelmalo	5,322	2,590	48.7	-20.1	7
Keren	11,541	12,852	111	+42.2	20
Kerkebet	4,357	342	7.8	-61	4
Sela	1,480	309	20.9	-47.9	2
Total	65,721	45,249	68.8		110

Source: MOE (2001) Essential Education Indicators 2000/01

Table 5.7 shows wide disparity between the sub-regions. The disparities range from 111 percent enrolment for Keren to 7.8 percent enrolment for Kerkebet. The disparity trends in the Anseba region, like that for the Northern Red Sea are characterised by urban and rural, centre and periphery, Muslim and Christian, Tigrinya and non-Tigrinya ethnic groups, and nomadic and non-nomadic areas. The three sub-regions of Keren, Elabered and Aditekelezan that have 42.2, 33.2 and 11.7 percentage points above the regional average in enrolment are predominantly urban and peri-urban. The Tigrinya and Bilen ethnic groups that live in these regions have long been exposed to schooling and are Christians. In contrast, the sub-regions of Kerkebet, Sela, Habero and Asmat that are hundred percent Muslims, rural and inhabited by the Tigre and Hidareb ethnic groups have primary school enrolment deviation of 61.0, 47.9, 33.7 and 31.1 percentage points below the regional average respectively.

Keren, Elabered, and Aditekelezan sub-regions have a long history of exposure to education. Their inhabitants are sedentary and the sub-regions are urban or semi-urban. They have better access to schooling which supports the notion that demand influences supply, i.e. when people are in a position to demand schooling, such as being in an urban area; supply is bound to follow easier. On the other hand, the rest of the sub-regions are rural, the people are nomadic and pastoralist. Their language had not been written until recently, and they had little exposure to or, history of education. They are therefore lagging behind in enrolment in the region. In other words, the cumulative effects of these sub-regions' sociological context resulted in a much lower demand for schooling which in turn impacted low supply.

The large enrolment gap between Keren, Elabered and Aditekelezan and the other sub-regions in the Anseba region can be attributed to urban rural, nomadic and non-nomadic factors, early exposure to education, and the availability or non-availability of written languages. For example, the two sub-regions of Kerkebet and Sela with the least enrolment, 7.8 percent and 20.9 percent respectively, are the most remote and predominantly inhabited by the Hidareb ethnic group who do not have a written language yet, and who are nomadic people. For the Hidareb people, like all other nomadic people, sending a child to school has a high opportunity cost⁸, and this may explain why fewer children from this ethnic group are enrolled so far. Before independence there were no educational opportunities for the Hidareb. There are no textbooks in its language. Hence, factors such as the non-availability of a written language and textbooks negatively affect supply and demand of primary education in the sub-regions as shown by the example of the Hidareb ethnic group.

As indicated above, the problem of access and disparities in primary school provision between regions and within sub-regions are the result of interplay between shortages of supply by the government on the one hand, and the lack of demand and under-utilisation

⁸ Opportunity cost in education is the cost that parents incur by sending a child to school thereby forgoing income that they might have earned if the child was not in school.

by groups of people in certain regions and sub-regions on the other. The scattered pattern of settlement in rural Eritrea does not warrant the standard primary school with five classrooms and a teacher for each class and the government has not introduced single teacher multi-grade schools yet. Consequently, schools and teachers are under-utilised, and this affects primary school access and efficiency adversely. The lack of demand for schooling in sub-regions and by some ethnic groups within the regions can be attributed to the great distance of the schools from place of living, negative perceptions towards schooling in general and towards schooling for girls in particular, as well as direct and indirect cost of schooling. The indirect cost of sending a child to school in a nomadic community is very high and this may explain why nomadic communities are reluctant to send their children to school. Having discussed regional and intra-regional disparities in primary schooling provision in Eritrea, I go on in the next section to discuss ethno-linguistic disparities in primary schooling provision in Eritrea.

5. 5. Ethno-linguistic disparities in primary school access in Eritrea

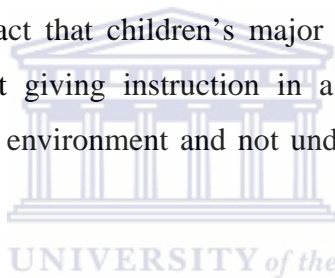
In the introduction to this chapter I pointed out that the Eritrean population is made-up of nine ethnic groups who speak nine different ethnic languages. I also stated elsewhere in the thesis that at primary school level mother tongue is the medium of instruction. These ethnic languages are in different stage of development. In this section, I provide an analysis of ethno-linguistic disparities in primary schooling. I argue that because of the uneven stages of development and functionality of the languages and the perceptions of the ethnic groups towards the languages, primary school access in Eritrea is ethno-linguistically inequitable.

The Eritrean language in education policy is based on a decree (1991) which assures the right of each national group to be taught in its own language. It is based on the government's position that affirms mother language teaching in Eritrea. It aims at promoting equal opportunity of language development and upholds the democratic and human rights of all ethnic and linguistic groups. In addition, the Eritrean language in

education policy is consonant with the view expressed by Lockheed and Verspoor (1991:153) who note that:

Children who speak a language other than the language of instruction confront substantial barriers to learning. In the crucial early grades when children are trying to acquire basic literacy as well as adjust to the demands of the school setting, not speaking the language of instruction can make the difference between succeeding and failing in school, between remaining in school and dropping out.

The pedagogical argument in support of mother tongue instruction is based on the view that children have a better chance of succeeding in school if they are taught in their mother tongue. Students who have learned to read in their mother tongue are able to learn to read in a second language more quickly than do those who are first taught to read in a second language. Cognisant with the fact that children's major learning problems are linguistic the government asserted that giving instruction in a language that is not normally used in the child's immediate environment and not understood and used well enough is problematic and wasteful.



Despite these well founded arguments, primary schooling in Eritrea is ethno-linguistically inequitable. These may be because some ethnic groups believe that their languages have no economic, academic and or social value or may distrust the government who advances the argument in favour of mother tongue instruction. With regard to language in education policy, Chaudenson (cited in Skattum, 2000:87) suggests that: "Good language policy is not one that puts all languages on an equal footing, but one that looks to functionality and language dynamics in the society, whilst assuring a space and function of their own for the minority languages." Arguing along the same line, Baker (1998:21-36) maintains that the "single most important variable in the choice of language of instruction is the usefulness of the language." Arguing further, Baker maintains that a language may be useful for national unity and technological progress when seen from a top-down perspective; or useful for reading and writing in one's daily life and for job opportunities, as seen from the bottom-up perspective (Baker,1998:34). The Eritrean government, I would suggest, has approached language in education from a top-down perspective as a vehicle for

national unity. In contrast, ethnic minority groups use a bottom-up perspective tying language into its use as a means of earning a living and for its functionality in the country. They apparently want a language that enables them to effectively engage in the politics and economics of the country.

No matter the arguments for or against mother tongue education, the Eritrean primary education system is, as I will show below, ethno-linguistically inequitable. Table 5.8 below illustrates disparity in provision by providing the numbers of primary schools by region and language of instruction.

Table 5.8 Primary schools by region and language of instruction 2000/01

Region	Language of Instruction								Total
	Afar	Arabic	Bilen	Kunama	Nara	Saho	Tigre	Tigrinya	
Anseba	--	15	29	--	--	--	37	51	132
Debub	--	1	--	--	--	18	--	195	214
GashBarka	--	51	--	13	12	1	36	54	167
Maekel	--	8	--	--	--	--	1	101	108
N.R.Sea	8	24	--	--	--	12	31	16	91
S.R.Sea	11	17	--	--	--	--	--	4	32
Total	19	112	29	13	12	31	105	421	742

Source: MOE (2001) Essential Education Indicators 2000/2001

First of all, we observe in Table 5.8 above, despite the government's redrawing of the country's regional boundaries, the regions still remain predominantly inhabited by one or two ethnic groups who speak their distinct ethnic languages. For example, the Kunama and Nara ethnic groups exclusively live in the Gash Barka region, and the Bilen ethnic group in the Anseba region. Similarly, the Afars are the sole inhabitants of the Southern Red Sea region and the southern part of Northern Red Sea. As can be read from the table, the only two ethnic groups that are found in substantial numbers in more than one or two regions are the Tigre and Tigrinya who comprise more than 80 percent of the country's population.

Table 5.8 shows a complete absence of the Hidareb language and ethnic group that makes up 2.5 percent of the Eritrean population. This ethnic group is scattered in the three lowland regions, they profess Islam and is mainly nomadic. They have no written language or enduring history of educational access. It is presumed that some sort of schooling is given to the Hidareb ethnic group in Arabic as their language is not yet transliterated. However, after ten years of independence, not catering for a section of population that constitutes 2.5 percent of the population is a profound neglect of its right to education in its language, running contrary to Eritrea's education and language policies.

Table 5.8 shows that out of the 742 primary schools, 421 or 56.7 percent use Tigrinya as medium of instruction. This means that the Tigrinya ethnic group, who makes up slightly less than one half of the total population, has 56.7 percent of all primary schools in the country. This shows that the provision of schooling favours the Tigrinya ethnic group. This may be because there is high demand for the Tigrinya language as it is the *de facto lingua franca* of the country. Tigrinya and Arabic are the working languages in Eritrea (UNICEF, 1994: 120). Another important issue shown in Table 5.8 is the number of Arabic medium schools. Despite the fact that only 0.5 percent of Eritreans speak Arabic as their first language, 112 schools or 15.1 percent of all primary schools teach in Arabic.

The high demand for Arabic as medium of instruction may be due to its religious appeal among Eritrean Muslims and the fact that Arabic is an international language with economic and social benefits. Moreover, the Tigre ethnic group, which makes up about 31 percent of the population, has only 14 percent of primary schools, which shows that even if an ethnic group is not a small numerical minority its language can be at a disadvantage. The other five ethnic groups (Afar, Saho, Bilen, Nara and Kunama) have 14.2 percent of the primary schools between them. This shows significant ethno-linguistic inequality in the provision of primary schooling in the country.

The above numbers and percentages of schools could be misleading if taken at face value. They disguise the real extent of the disparities. To get a more nuanced perspective one has to compare the number of schools that function in the respective ethnic languages to the actual number of pupils who learn in each of the ethnic languages. For example, Table 5.9 below provides a picture of the extent of disparities in provision, as it provides information on number of schools, enrolment by language and school pupil ratio by language.

5.9 Number of schools, pupils and school pupil ratio by language 2000/01

Language	Number of schools	Number of pupils	School pupil ratio
Afar	19	1,687	88
Arabic	112	26,589	917
Bilen	29	6,341	218
Kunama	13	1,981	152
Nara	12	1,537	129
Saho	31	4,010	129
Tigre	105	28,000	267
Tigrinya	421	228,032	542
Total	742	298,691	

Source: computed from Eritrea Basic Education Statistics 2000/01

Table 5.9 shows the actual picture regarding school access by language group. 76.3 percent of gross primary school enrolment is in the Tigrinya language and 56.7 percent of all Eritrean primary schools are Tigrinya language medium schools. The 421 schools that use Tigrinya as medium of instruction have an average of 542 pupils per school each. The standard primary school in Eritrea (grades 1-5) has the capacity to accommodate 250 pupils in a single shift mode and 500 pupils in a double shift system. Thus, schools using Tigrinya as medium of instruction are optimally utilised. This shows the high coverage of schooling for the Tigrinya ethnic group and the high use of Tigrinya as a medium of instruction.

Similarly, the 112 schools that use Arabic as medium of instruction are catering on average for a student population of 917 each. There is thus a considerable use of Arabic as

medium of instruction and schools are used optimally. This may be because Muslims prefer Arabic as language of instruction for religious purposes. The fact that Arabic is the second working language in the country is also a reason for the high preference of Arabic as medium of instruction. The presence of many returnee Eritrean children from the neighbouring Arab countries is also a plausible explanation for this surge of demand for Arabic. A study by the University of Leeds showed that most of the 700, 000 Eritrean refugees were living in the Sudan where Arabic is the main language. According to UNICEF (1994:12) out of the 80, 000 refugees who have returned to Eritrea by mid 1994, 79 percent were from the Sudan. These people and their children had exposure to the Arabic language, which affected their choice of language of instruction and schools.

On the other hand, as clearly displayed in Table 5.9, the other ethnic language groups barely utilised the schools that were supposed to teach in their languages. For instance, the 19 schools that use the Afar language as medium of instruction only have a total of 1687 pupils, with an average of 88 pupils per school. If we divide this number into the five grades that comprise the primary level, it comes to 18 pupils per grade. Similarly, if we take the Nara and Saho schools and compute the number of pupils per school the figures come to 128 and 129 pupils per school respectively. If we further divide that number by the number of primary school grades, it comes to about 26 pupils per grade.

Based on the data provided above, we can infer that primary school provision in Eritrea is ethno-linguistically inequitable. It seems there is little demand for schooling by the minority ethno-linguistic groups. The reasons may be that schooling in some regions and sub-regions and for the ethnic minorities is expensive both in terms of direct cost and the income that they have to forgo by sending children to school. It could also be that the ethnic groups are not in favour of learning in the mother tongue based on their perception that their language has no economic or political advantages. Skutnabb-Kangas (1988:10) argues that:

Those individuals, whose mother tongues do not happen to be official languages in the country where they live, have to become bilingual (or multilingual). If they want to be able to speak to their parents, know about

their history and culture, know who they are, they have to know their mother tongue. If they want a good education (which is usually not available in their own language, at least not in the same extent as in the official language) and if they want to participate in the social, economic and political life of their country, they have to know the official language.

It seems to me that the views of Eritrean minorities on mother tongue education are consonant with Skutanbb-Kangas's argument. In the next section I go on to provide an explanation of the reasons for ethno-regional disparities in primary schooling in Eritrea.

5.6 Causes for ethno-regional disparities in primary school access in Eritrea

I have attempted to shed light on the state of primary schooling provision in Eritrea by analysing access in terms of inter-region disparities, gender disparities, intra-region disparities and ethno-linguistic disparities. As argued by Anderson (1992: 8-12), education systems usually fail to reach and teach many children, either because schools do not exist or are overcrowded. A school's schedule can also make it impossible for some children to attend. Parents may also refuse to send their children if they think the curriculum is irrelevant. Sometimes education systems fail to educate children adequately due to the poor quality education they offer. In this section of the chapter, I will make an attempt to explain the causes for educational disparities in the Eritrean primary school system discussed in the earlier sections of the chapter.

Efforts to expand and equalise education opportunities face many constraints, which have both supply and demand entailments. According to Farrell (1992:114), the most obvious and frequent constraining factor is lack of resources; financial, physical and human. The second is geographic and demographic; such as vast distance, low density population, harsh environment, and poor communication. The third constraint is the cultural and socio-political characteristics of a country. However, there are obstacles on the demand side as well. For example, Bowman (1984:563-583) argues that parents may not send their children to school because they may regard the education provided there as either inappropriate (on religious or cultural grounds), of little use, or not worth the opportunity

cost of the child's labour. From these arguments we can conclude that access disparities can be due to a combination of physical inaccessibility, economic inaccessibility and socio-cultural inaccessibility.

The causes for inequitable access to primary schooling between the regions and within the regions and the various ethnic groups in Eritrea are generally related to the earlier political history of the country coupled with the ability and willingness of the state to supply schools. A key factor is the nature of demand and utilisation of educational facilities by the country's people. As mentioned in earlier chapters of the thesis, in terms of educational opportunities Eritrean regions can generally be categorized into formerly advantaged and formerly disadvantaged regions. The formerly advantaged regions are the two highland regions of Debub and Maekel. For political reasons and because of their proximity to centers of the colonial economy they had better access to schooling during the respective colonial periods. The highlanders, owing to their proximity to the capital city and the colonial economy and their privileged access to basic services such as education, had accumulated wealth and power that laid a foundation for their comparatively higher educational achievements. The Tigrinya language being a written language, gave the Tigrinya speakers an opportunity for a head start in education. Education distribution among regions and sub-regions had thus never taken place on a level playing field.

As the *de facto* official language in the country, Tigrinya is the sole language of politics and economy. Government economic enterprises use Tigrinya in their daily transactions and this makes the language the sole functional language in the country. This generated demand for schooling in that language and by its speakers. Despite the government's pronouncements of equal status of Eritrean languages, this concept does not exist in practice.

The four lowland regions of the Northern Red Sea, Southern Red Sea, Anseba, and Gash Barka are formerly disadvantaged regions, the outcome of a deliberate discrimination by the Ethiopian colonisers. The lowland regions were bitterly opposed to Ethiopian

occupation which lasted for thirty years from 1961 to 1991. Ethiopia withheld educational provision as a form of political punishment (UNICEF, 1994: 104). A needs assessment survey conducted by Leeds University in 1992 found that in the lowland areas of Eritrea, only about 12 percent of males and 9 percent of females in the 8 to 45 year age group were literate in any of the languages used in the region.

The second and most decisive reason was lack of demand for education by the people in these regions. Factors that caused this situation were the imposition of an Ethiopian curriculum, the change of medium of instruction from Arabic to Amharic, and the use of the Geez⁹ script, which is associated with Christianity and the Ethiopian occupation. Moreover, the Eritrean lowland regions formed the bastion of the Eritrean armed resistance and therefore were not safe for schooling at all. As argued by Boyden and Ryder (1996:10-12), in war zones education is always brought to a standstill, entire education systems are destroyed, schools are either closed or wrecked and teachers and students are killed, detained or conscripted. This situation carried on in lowland Eritrea for the duration of the thirty year war with Ethiopia, between 1961 and 1991. Similarly, the absence of a written language and history of education among the rest of the Eritrean ethnic groups made ethno-regional disparities more noticeable.

The current inequitable state of primary school provision, however, cannot solely be attributed to the head start of the highland regions and the inequities of the colonial periods. Low enrolment in primary schools in the Eritrean lowlands, according to an interview I conducted with MOE's regional education officers for Anseba and the Northern Red Sea (Ato Haile Mebrahtu and Wedi Bashai), and studies conducted by the MOE (2000), UNICEF (1994) and UNESCO (1996), was due to the nomadic way of life, scattered settlement patterns, general household level poverty, conservative cultural background, difficult terrain, harsh climatic conditions and insufficient understanding of the value of education by the people.

⁹ Geez is an old Semitic language from which the Tigre; Tigrinya and Amharic languages, spoken in both Eritrea and Ethiopia are derived. It has its own script and is written from left to right. Geez as a language is confined now to the Coptic Orthodox church in both countries, but the script is used for writing Tigre, Tigrinya and Amharic languages.

According to studies conducted by Woldemichael (1995:33), Kane (1996:111-112), and UNICEF (1997:5), low enrolment in primary schools in the three lowland regions can be ascribed to high level poverty and low parental literacy levels. Factors such as the non-written nature of the languages, lack of teachers who can teach in the various ethnic minorities' mother tongues, an indifferent attitude towards education by some sectors of the population, shortage and distance of primary schools, and the non-availability of sufficient middle schools within a reasonable distance contributed to low enrolment. Lack of community infrastructure, such as milling machines, child centres, single sex schools, and the shortage of female teachers exacerbated the situation for girls' non-enrolment in particular.

Schools in the lowland regions are far from where most people live because of the scattered settlement and demographic patterns. In interviews conducted with education officers from Anseba and the Northern Red Sea regions, they pointed out that, on average, students in their respective regions travel between five and eight kilometres to school. An MOE (2000) report pointed out that the average distance of school from home in the Eritrean lowlands is 12.5 kilometres one way. Thus, in the lowlands, distance is a key obstacle to access, especially for young children and girls. In addition, the rugged terrain, very hot climatic conditions and malnutrition negatively affect enrolment and survival in primary education in the lowlands. A study conducted by the MOE to assess the effect of school feeding on attendance and achievement in primary schooling shows that nutritional supplements have an enormous impact on children's learning, motivation, health and physical conditions.

Another crucial determinant of inequitable access is the shortage of educated personnel to teach in the minority ethnic languages. There is shortage of teachers to teach in the Afar, Nara, Hidareb and Kunama languages (MOE 2001). In addition, these languages have not been written languages until recently, and the transliteration process is still in its infancy. Thus, there is very little reading material written in these languages.

According to one education official interviewed at the curriculum department, the issue of mother tongue education is the chief cause for the lack of demand for education in the lowlands. According to this official, many ethnic language speakers believe that their languages have no economic, academic and or social value in Eritrea. They also distrust the motives of those who advance the argument in favour of mother tongue instruction. This view conforms to Hernandez-Chavez's suggestion that dominant majorities use language to limit access to positions of power and economy to minorities (Hernandez-Chavez, 1988: 45). This education official maintains that minority ethnic groups only want to learn in either of the two dominant working languages, i.e. Tigrinya or Arabic, so as to meaningfully participate in the country's political and economic developments. People want to learn in a language that is functional, a language that enables them to communicate with the rest of the country and a language that enables them to earn a living. According to this education official, despite the fact that mother tongue education is pedagogically sound it is an investment that has little private or social return in the Eritrean context. Skutnabb-Kangas (1988:14) extends the argument further saying that:

If you want to have your fair share of the power and resources (both material and non-material) of your native country, you have to be able to take part in the democratic process in your country. You have to be able to negotiate, try to influence, to have a voice. The main instrument for doing that is language. You must be able to communicate with your fellow citizens, in order to be able to influence your own situation, to be a subject in your life, not an object to be handled by others. Language is the main instrument for communication. If you live in a country with speakers of many different languages, you have to share at least one language with the others, in order for a democratic process to be possible. And if the language most widely spoken by your fellow citizens (either because it is the mother tongue of the majority, or because the power elite has decided that will be the *lingua franca*) is not your mother tongue, you belong to a linguistic minority in your country. That means that you have to become at least a bilingual in order to participate.

Another contributing factor to limited access to schooling in general and disparities in schooling access between and within the regions and ethnic groups is the cost of education. Cost of schooling is a difficult hurdle to overcome both by the state and the families. The government of Eritrea has been allocating between 2.2 percent and 4.9

percent of its GDP to education from 1993 to 2000 (ESDP, 2005:29). However, the government's ability to further mobilise resources for education is constrained under present circumstance and this adversely affects school access. Table 5.10 below shows the level, magnitude and depth of poverty in Eritrea with aggregate comparative data for Sub-Saharan Africa.

Table 5.10 Key social indicators: Eritrea and Sub-Saharan Africa

Social indicators	Eritrea	Sub-S Africa
GDP per capita	US\$ 115-130	520
Population growth	2.7-3.0	2.9
Illiteracy (% of population age 15+)	80	50
Female illiteracy(% of population age 15+)	90	62
Poverty (% of population under poverty line)	53	n.a
Life expectancy (years) and the state	46	52
Infant mortality rate (per 1000 live birth)	135	93
Prevalence of child malnutrition (% of children under 5)	44	31
Population below minimum level of dietary energy (%)	40	33
Total fertility rate	6.8	6.2

Source: Ministry of foreign Affairs (1993); World Bank (2003) World Development Indicators database, April 2004

Table 5.10 above shows Eritrea's low GDP per capita, high fertility rate and high population growth and the magnitude of poverty. Taking these social indicators into consideration, it is clear that Eritrea has been struggling to provide access to quality schooling opportunities to its children.

Although direct costs affect all regions and ethnic groups, their impact and consequences are not felt equally between the regions and the various ethnic groups. It affects rural and nomadic people, working children, the unemployed and the lowland regions much more adversely. People in rural areas and those who make a living on the agro-pastoral economy need their children's labour more than the rest of the population. Anderson (1988) asserts that the necessity for children to perform economically important tasks that support household survival limits educational participation by the rural and urban poor. Those ethnic groups who predominantly depend on livestock rearing, such as the Tigre,

Hidareb, Rashaida and the Afar, loose most due to the high opportunity cost of child labour.

The quality of education is another factor that affects ethno-regional disparity in primary school access. According to the Dakar framework for Action (2000:17), the quality of education has to be improved if children are to be attracted to school, stay there and achieve meaningful learning outcomes. I stated earlier that the quality of the Eritrean education system is generally poor. Schools that use ethnic minority languages as medium of instruction are the worst affected, because of a shortage of qualified people to prepare textbooks, to be trained as teachers, and to administer and supervise the teaching learning process. Because of its low quality, schooling is regarded as of little use and not worth the opportunity cost of the child's labour. Similarly, because of the irrelevance of the curriculum to rural life and nomadic communities, for which the majority of the students are destined, parents and children perceive schooling as irrelevant and not worth the five years¹⁰ spent in the system. If Eritrean primary education is to serve its intended purposes, improvement of quality will have to be addressed with the same sense of urgency as efforts to increase access quantitatively. Education must in the final analysis be judged by the learning it produces.

Children's health condition and nutritional status are also additional factors that have impacted on access disparities among the different Eritrean regions and ethnic groups. As noted by the MOE (2001:45-46), children in most parts of rural Eritrea and the lowlands areas in particular have to contend with frequent episodes of respiratory illnesses and diarrhoea during the school year that can impact their learning negatively. In addition, the lowland areas are malaria prone, and as a result children are frequently absent from school during the year which leads to repetition and drop-outs. Non-availability of safe potable water is also a problem that usually contributes to illness, absenteeism, low

¹⁰ The standard primary school curriculum was designed for middle income urban children. It is irrelevant for children in rural and other disadvantaged areas. It creates discontinuities between life at home and community, and life at school. It alienates the rural child from the farming and nomadic community for which the majority are destined.

achievement and dropping out from school. More than 46 percent of schools in Eritrea do not have access to safe and potable water (MOE, 2001: 46).

Table 5.7 above indicates that 40 percent of the Eritrean population is below the minimum level of dietary energy and child malnutrition is as high as 44 percent. Similarly, a Health and Nutrition Survey conducted in (1993) shows that 10 percent of Eritrean children were emaciated, 66 percent were stunted and 41 percent were underweight. According to a UNICEF survey (1994:35), the coastal region of Northern Red Sea contains the greatest proportion of malnourished children with 70 percent stunted and 27 percent emaciated. On the other hand, the Debub region in the highland areas of Eritrea had the lowest level of stunting at 33 percent and 7 percent wasting. These disparities in health and nutritional status between the regions it showed ethno-regional disparities in school access and achievement between the regions.

5.7. Conclusion

Chapter five highlighted the view that Eritrean primary school provision is ethno-regionally inequitable with the two highland regions of Maekel and Debub being the most advantaged in terms of number of schools and level of enrolment. It discussed the ethno-regional educational disadvantage of the four lowland regions, with the two coastal regions of Southern Red Sea and Northern Red Sea being the most affected. In addition, the chapter indicated that a breakdown of the regional averages reveal huge educational disparities between the sub-regions. While sub-regional disparities are wider in the lowland regions, there are sub-regional disparities in the highland regions as well.

With regard to disparities by language of instruction and ethnicity in primary school access, the chapter illustrated that the Tigrinya ethnic group has the lion share of primary school access in the country. Moreover, the chapter indicated that in terms of primary school access, all the remaining other ethnic languages are underprivileged. In particular, the Hidareb, Nara, and Afar are the most deprived ethnic groups in terms of primary

school access. The chapter also revealed that despite their relative numeric superiority of 31 percent the Tigre ethnic group has very limited access to education.

Pertaining to the causes of these disparities, the chapter pointed out that the colonial and educational history, state and household level poverty, geographic and demographic conditions of the respective regions, language of instruction and the health and nutritional status of the respective ethnic groups, played a defining role. The chapter also underlined the role of direct and opportunity costs of education, and parental literacy levels as key determining factors in school access. Parental perception towards the benefits of schooling in the respective regions and among the respective ethnic groups contributed decisively in ethno-regional disparities. Having discussed the state of disparities in primary school access in Eritrea in this chapter, the next one focuses on the qualitative functioning of the system.



Chapter 6: Regional and gender disparities in educational achievement and efficiency in Eritrean primary schools

6.1. Introduction

In chapter four and five I pointed out the fact that despite the commendable efforts by the government to reform the education system many educational ills are still in place. I pointed out that in spite of the substantial increase in access stark disparities remain within the education system. Like most education systems in developing countries the Eritrean education system is plagued with high repetition and dropout rates, which are characteristics of inefficiency and wastage. According to the ESDP findings (2005:13), Eritrea is facing daunting challenges pertaining to low access and equity, inadequate quality and relevance, low internal efficiency and limited institutional and financial capacity.

In this chapter I provide an analysis of the efficiency of the Eritrean primary school system with an emphasis on promotion, completion, repetition and drop-out rates by region, gender and grade. The motives for discussing systemic efficiency are multiple: first, the nature of access in developing countries is determined by the efficiency of educational provision, and second, providing access that disregards efficiency is clearly unsustainable. In addition, poor developing countries like Eritrea can hardly afford inefficiencies in their education system. They will only succeed in achieving primary education access by using their meagre resources efficiently.

This chapter is based on data and information gleaned from official documents of the MOE and the monitoring of learning achievement (MLA) report. The documents include statistical data on promotion, repetition and dropouts. Existing research reports on the quality and efficiency of education will also be examined. In addition, information that I collected through observations of school operations and data from informal interviews I had with teachers and parents will also be utilised I will also draw on my own experience

as an insider in the MOE, which provided me insight into the nature of disparities in achievement and efficiency in Eritrean primary schooling.

The first section of the chapter provides a conceptualisation of learner educational achievement and efficiency in education and reviews factors that contribute to school inefficiency. The second section of the chapter discusses the state of educational efficiency at the system level and argues that the system is inefficient and wasteful at the national level. The next part of section two analyses primary school inefficiency by region and by gender, focusing on questions of resource use, repetition and dropout rates. The third section of the chapter examines the causes for wastage and inefficiency of the education system. The conclusion pulls together the various stands of the argument and posits a summative understanding of efficiency and achievement in the country.

6.2 Conceptualizing achievement and efficiency in education

This section of the chapter has two main parts and discusses two key educational issues. Part one discusses the determinants of learner educational achievement. It looks into the major theories that explain learner educational achievement and identifies some of the basic indicators that explain learner educational achievement. Part two of this section focuses on educational efficiency in general and internal inefficiency in particular.

Understanding what determines learner educational achievement is a key issue for developed and developing countries and organisations concerned with education. In line with this, exhaustive research has been carried out to understand what influences learner educational achievement. For instance, Carron and Chau (1996), Caillods and Postlethwaite (1998), Lockheed, Fuller and Nyirongo (1989), Fuller and Heyneman (1989), and Maja (1997) identified those factors that have the most impact on learners' educational achievement. According to Carron and Chau (1996), despite the fact that they acknowledge the importance of school facilities, textbooks and other teaching learning materials in learner achievement, learner achievement is significantly influenced more than anything else by the interaction between various human factors such as the

school principal's pedagogical leadership role, the teacher's motivation to teach and his/her teaching style, the quality of parental support, and regular interaction between teachers and parents.

Caillods and Postlethwaite (1989), focus mainly on the interaction between teachers, the curriculum, instructional materials and learner achievement. The key factors which operate to produce learning and achievement are teacher characteristics, their working conditions, the classroom and school teaching environment as well as the availability of relevant school resources. Lockheed, Fuller and Nyirongo (1989), specifically focus on the influence of family background characteristics on learner achievement. According to them, social class, learner educational expectation, parental encouragement and learner's attitude and effort are the key determinants in learner's educational achievement.

Fuller and Heyneman (1989) agree with Caillods and Postlethwaite that family background plays a role in determining learner achievement, but argue that it is basic school inputs that have a significant influence on learner achievement. In developing countries in particular where there is lack of the very basic educational inputs such as textbooks, chalk and the chalkboard, school inputs are very crucial in learner achievement. On the other hand, Maja (1997), argues that learner's achievement before anything else is influenced by formal access and "epistemological access" to learning. According to Morrow (1994: 38-42), formal access to learning refers to opening schools to all children, providing school places within those schools, providing qualified and helpful teachers, providing the teaching learning facilities and resources, and encouraging learners to learn, while "epistemological access," refers to the process or learning practices by which the learner actually acquires knowledge, and learns how to become an active participant in the learning practices through individual effort. Drawing on South African experience, Maja ascribes a key role to teacher quality. Maja argues that teacher attitudes, competence and teaching styles are the key contributing factors to learning achievement (1997).

On the theoretical level, four major sets of theories have been used to explain educational achievement (Lee, 1991:132). The first is hereditary theory (Jensen, 1969), which suggests that variations in educational achievement are mainly caused by hereditary differences in conceptual and problem-solving skills, grasping relations and symbolic thinking. The major problem with the genetic difference theory is its silence on the impact of environmental difference (Lee, 1991:133). However, the individual child's study habits, attitudes and interest, motivation, and self-concept influence educational achievement.

The second theory is cultural deprivation theory (Coleman et al., 1966; Glazer and Moynihan, 1963; Deutch, 1969 cited in Lee, 1991: 132), which attributes disparities in educational achievement to deficient home or cultural backgrounds. It assumes that some children lack the cognitive, linguistic and other skills necessary for school success because their parents do not possess these skills to a sufficient degree to teach them to their children. On the other hand, cultural advantage theory (Schwartz, 1971; Vernon, 1982), cited in Lee (1991:132) which is corollary of cultural deprivation theory, attributes educational achievement to parental literacy, firm parental control, motivation for educational achievement, and the need for hard work to gain success.

The third theory is cultural conflict theory (Valentine, cited in Lee 1991:133), which argues that learners' educational achievement is affected by the difference between their home culture and the mainstream culture and attitudes, values and learning styles required for success in schools. Cultural deprivation, cultural advantage and cultural conflict explanations are valuable but not entirely adequate to explain achievement (Lee, 1991:133).

The fourth theory draws on structural explanations and has two strands. The first strand attributes educational achievement levels to the organisation of school and society which perpetuates inequalities through educational discrimination (Bowles and Gintis,; Lindblom,, cited in Lee, 1991: 133). The second strand of structural theory attributes educational achievement to perceptions of opportunities within a stratified society (Ogbu,

1978 cited in Lee, 1991:133). The structural explanation has substantial value in illuminating the issues that influence learner achievement, though it tends to ignore cultural characteristics. In brief, the four theories we discussed above have their strengths and weaknesses in explaining learner educational achievement, therefore, in order to provide a powerful explanation for educational achievement it is important to view cultural and structural explanations in concert.

Like equality of access to schooling, equality of survival in the school system is very essential. It is not enough to get children into school; they must also be persuaded to stay there. Boissiere (2004: 1) argues that in today's world, simply getting children into schools is not enough; governments must also ensure that children complete the primary cycle and attain the basic knowledge and skills needed to survive in today's world. Research conducted by King (1990:52) and Schiefelbein (1975:468-487) indicates that in low-income countries, the completion proportions are just over 50 percent, and in some very poor nations, the primary completion ratios are far below 50 percent. Haddad et al (1990) claim that at a global level about 15 percent of all primary and secondary school students are repeaters, and as much as 20 percent of the education budget is spent on repeaters and future dropouts. This shows that education systems in developing countries are wasteful and inefficient. According to Schiefelbein (1975), the high rate of non-survival are a result of combined effect of high repetition rates and the high proportion of children dropping out of school. Farrell (1992:115) claims that poor children and children born in rural areas have lower survive rates¹¹ than well-to-do and urban children and that repetition and dropout rates are higher among girls than boys.

Pursuing this line of argument, Patrinos and Psacharopoulos (1996) noted that repetition is especially severe amongst the most deprived, such as those whose parents have the lowest levels of education and income. Moreover, Schwille et al. (1991) suggest that student characteristics such as gender, ethnicity, family influence, place of residence and age act to influence repetition. They observed that these in turn affect student learning,

¹¹ Survival rate is the percentage of a cohort of pupils enrolled in first grade of primary school in a given school year who are expected to reach a successive grade, typically fourth or fifth.

student motivation and self esteem, the examination success and the mean time required to go through the system. With financial resources strained to the limit, educational authorities in developing countries have noted a serious disparity between educational efforts on the one hand, and outputs in terms of educational attainment on the other. The large numbers of pupils who repeat grades, or drop out after one or two years of schooling represents a tremendous waste of resources. This observation brings the problem of educational wastage into focus.

Efficiency implies maximizing inputs in an endeavour to produce optimum goods or services. This translates into an appropriate curriculum in terms of scope and sequence, adequate instructional materials and learning time, and effective teaching practice (Lockheed, 1993: 20). However, Easton and Klees (1992:140) argue that how children survive and move through school depend largely on what they and their families see ahead for themselves in terms of work and lifestyle. This indicates that educational efficiency is influenced by both supply and demand factors. Educational efficiency is impacted by macro and micro level factors such as national conditions, state policies and global factors, on the one hand, and family, school and community factors on the other. Many characteristics of the family that affect educational achievement of children are:

The values and meaning the family attaches to education, the pressures parents create toward achievement, the extent to which the home environment stimulates intellectual development, the language model provided by adults in the family, the forms of discipline and control used by parents, the academic guidance parents provide, and the extent to which the home situation facilitates desirable work habits. (Backman and Secord, 1968:16)

This implies that enrolment and achievement in education are determined by both macro and micro level factors. Educational efficiency is determined in large measure by state policies such as the amount of educational budget allocated to education, teacher training and remuneration, promotion policies, and the overall economic policy of a government. Similarly, family factors (socio-economic status, structure and resources), school level factors (inputs, processes and organization) and community level factors (structure and

resources) combine to influence educational outcomes. Backman and Secord (1968:8) argue that social class affects education in several ways. They argue that attitudes towards education held by parents and children vary among different social classes. Upper and middle-class parents generally have positive attitudes towards education. They have higher occupational aspirations for their children, and they provide them with a stimulating intellectual environment which has a strong positive bearing on educational achievement. Social class often determines where the family lives and what type of school s/he attends. The teachers reflect certain social-class values and are apt to treat children from different social classes differently. Thus, educational non-achievement, wastage and inefficiency have social, cultural, and economic roots beyond the school system itself. In analyzing educational efficiency of an education system in developing countries, it is important to distinguish between the organisational, personal and material conditions within the school system, the general economic, social and cultural characteristics of the society, and the cultural attitudes of parents (Berstecher 1972:82).

Riddell (1998:277-292) suggests that the efficiency of an education system can be judged by whether it is producing the goods (increased learning) at the lowest cost, i.e. internal efficiency, and whether the products of the system (graduates) have the intended quality of knowledge and skills and perform as expected in the world of work. According to this definition, educational efficiency is categorized as internal and external and is judged in terms of quantity and quality. Internal efficiency is about the quantity of output produced for a given amount of input, and is revealed by the promotion, repetition and dropout rates of an education system. It provides a means of how effectively a school system allocates its resources to achieve its objectives, and it involves a consideration of education inputs and outputs. According to Greenwald, Hodges, and Lane (1996:361-396), the most important educational inputs that positively affect efficiency are teacher education, teacher experience, teacher salary, teacher pupil ratio, and school and class size. Haddad et al (1990), suggest that in developing countries the most important input for raising school efficiency is improving inputs such as textbooks, homework and time spent on school. There is a consistently a more positive relationship between student achievement and textbook availability than between achievement and other variables

such as teacher training, teacher incentives, class size and school facilities (Heyneman et al, 1981:227-46).

In contrast, external efficiency in education refers to the quality of educational outcomes such as the amount of learning mastered by the student and the quality of skills acquired as expected by the world of work for a given amount of educational input. It is also judged by how the market and society at large value it. An education system that merely aspires to increase numbers is potentially wasteful. Hanushek (1995:236) contends that high quality schools raise student achievement, speed students through the school cycle, save costs and improve internal and external efficiency.

An internally inefficient education system is characterised by high repetition and drop out rates which are indicators of non-survival. Carron and Chau (1981:78) argue that repetition is structural as it is mainly caused by the way the school system works, and is enforced by stringent examination that demands recalling of facts and figures than understanding concepts. Decisions about promotion and retention, the passing and failing marks, and the percentage of pupils that proceed to the next level are policy level issues. According to Pierola et al (1992 :25-37), internal inefficiency results from education policy regarding promotion and retention, limited space in and access to higher grades, low demand for schooling and low achievement. Internal inefficiency can also be the result of individual teachers' promotion criteria, expectations and assumptions about students' academic attainment and future potential. Other factors that contribute to drop out and inefficiency are; distance from the next level school, national exams that select a limited fraction at the end of each level and poverty. Internal inefficiency can also be due to students' and parents' perception about the returns of schooling. If parents and students perceive that the returns on investment in schooling are less than the economic and socio-cultural burden that they have to bear students drop out by themselves or are pulled out of school by their parents.

Serpell (cited in Chimombo 2005: 137) observed that people are react to a situation where they see nothing good coming out of school, they view schools as simply in the business of producing failures. In rural areas children start at an older age and as a result boys reach employment age and girls puberty before they complete primary education and therefore are prone to dropout or to be withdrawn by parents. This causes internal inefficiency in the functioning of the education systems. Thus, culture, ethnic attitudes towards schooling, and labour demands influence internal efficiency of an educational system (Pierola et al 1992:31- 40).

In sum, it can be argued that learner educational achievement and education efficiency are determined by structural factors such as the way schools and society are organised as well as perceptions of educational opportunities by the learners and their parents. Incongruence between home and school culture adversely affects learner achievement and education efficiency. Deficient home or cultural background such as the lack of cognitive and linguistic skills and individual learners' aptitude and effort also play a role in determining educational achievement and education system efficiency. Supply side factors such as availability of basic school inputs (textbooks, chalk and chalkboard), teacher quality, adequate school leadership and class size and demand side factors such as poverty, child labour, parental perception, social and cultural barriers and educational cost have a bearing on educational achievement and efficiency. Macro and micro-level interactions, such as, national and global policies, home and school environment and family background such as learner educational expectation, parental encouragement and learner's attitude affect achievement and efficiency. In addition, interactions between various human factors represented by school principals, teachers, parents and learners play a decisive role in educational achievement and efficiency. Based on the framework provided in this section, I will now move on to an analysis of the nature of (in) efficiency of educational provision in Eritrea.

6.3. System and school level inefficiencies

According to UNICEF education mission report (1997: 9), high rate of dropout and repetition are common features of the Eritrean primary education system. The same report contends that it takes ten years on average for a child to complete five years of primary schooling. Moreover, a fifth of all students repeat each primary class. The ESDP report (2005: iii) indicates that the Eritrean education system is wasteful of resources, because of a 20 percent grade repetition rate per year. In addition, with about 7.6 student years per graduate as compared to five years for perfect efficiency, internal student flow through the system is low. The cost per graduate is 50 percent higher than what it is supposed to be. In addition, as I pointed out in chapter five (section 3), there are large disparities between gross and net enrolments owing to high repetition and late entry, which consequently affect school access negatively.

What makes the Eritrean education system in general and the primary school level in particular more wasteful and inefficient is the underutilization of school buildings and teachers, high construction cost, its language in education policy, non-diversification of educational financing, long holidays, low time-on-task, and high teacher turnover. I will discuss each of these issues in the next section in order to elaborate further on how each one of them affected the efficiency of the system. With regard to the little effort exerted by the MOE to maximize the efficiency of resource use, particularly school buildings and teachers, it suffice to mention that as indicated in chapter five (section 4), the majority of rural primary schools in general are under-utilized, particularly those schools in the lowland areas that teach in minority ethnic languages. For example, 36.7 percent of all schools in the rural areas have a student population of less than 250, and 33 percent of schools have a student population that vary between 250 and 500 (MOE, 2001:43).

But, if we look into the respective regions and minority ethnic language schools the picture is quite grotesque. For instance, as noted in chapter five (sub section 4.1), in some Northern Red Sea sub regions i.e. (Gelalo and Dahlak) the school pupil ratio is 1: 99, and 1: 57 respectively. The inefficiency or underutilization of schools by language of

instruction clearly depicts the massive wastage in the education system. As mentioned in some detail in chapter five (see section 5), minority ethnic language groups had barely utilized the schools that were supposed to teach in their languages. For instance, the 19 schools that use the Afar language as medium of instruction have altogether 1687 students, which is an average of 88 students per school, and 18 students per grade. Similarly, the Nara and Saho schools have 128 and 129 students per school respectively, which is about 26 students per grade. This represents an enormous underutilization of educational resources and educational wastage as primary schools there had to accommodate at least 250 students with about 50 students per class.

The Eritrean primary education system is also characterized by an underutilization of its human resources, particularly teachers. This is due to a number of factors, including its language policy on education which doesn't allow ethnic crossing, i.e. teaching in a school outside a teacher's ethnic language. Teachers who teach in schools for a particular minority ethnic language are not available for use in other ethnic language schools because of language barriers and the teacher deployment policy. This policy compartmentalized the teaching staff and made it difficult to deploy teachers from places where there are an excess of teachers to places of scarcity. Owing to this policy restriction some teachers, particularly in lowland rural Eritrea, teach only during the morning sessions and even then in classes that seldom have more than 20 students. In the highlands, however, teachers who teach in the Tigrinya language have between 35 and 40 periods of teaching per week, and classes of 60 students on average. The MOE's non-use of multi-grade teaching in situations of low enrolment is an additional contributing factor to the overall inefficiency of the system. Its language in education policy also deprives the MOE of benefits of economies of scale in textbooks printing as it has to print textbooks in nine different languages and three different scripts for very small numbers of students in the respective languages. From the point of view of equity this is a remarkable policy, however, from an efficiency point of view it deprives the Ministry from economies of scale, and therefore, one has to juggle equity and efficiency.

The high cost of school construction is another stumbling block. As indicated elsewhere in this thesis it costs in excess of US\$ 35,000 to construct a classroom in Eritrea, which is very high¹² compared to similar facilities in other developing countries (World Bank Education Sector Improvement Project, Project Appraisal Document, 2003, ESDP, 2005). An additional reason for wastage is the MOE's insistence on a standard primary school of five classrooms made of cement blocks and corrugated iron roofs, and the use of building contractors who demand exorbitantly high fees. It would be more cost effective to build small schools with three or two classrooms using local materials and local labour in rural areas where there is a very small student population.

A draft national education policy on the financing of education (2003:13) states that Eritrea with its low per capita income and widespread poverty cannot mobilise sufficient domestic funds to finance the provision of learning opportunities to its citizens. The MOE, therefore, considered widening its education financing sources through the introduction of cost sharing and cost recovery mechanisms, coordination with development partners and to encourage private sector investment in education. However, because of a failure to put this education policy decision into practice the Eritrean education system remains under-funded and therefore inefficient. For example, according to MOE's educational statistics for 2000/01 out of the 667 primary schools in the country only 88 (13.2%) of the schools are non-government owned. In terms of student population, out of the total primary school population of 298,691 for the same year, only 27,860 (9.3%) were attending non-government schools, which means the government had to shoulder almost all the educational expenditure for the country. This stretches the already strained educational budget further and as a result quality deteriorates. Parents see the education provided as not worth the cost and time, leading them to pull their children out of the system.

¹² The reasons for the high cost of school construction in Eritrea are: Eritrea's demanding physical environment, limited capacity of the projects management division within MOE to follow up on contracts and to monitor construction in progress, and lack of capacity to examine standard designs and amend these to reduce costs.

Low per capita income affects the capacity of governments to finance and deliver quality schooling. It is therefore imperative that the government searches for means that help reduce costs of education by considering the use of additional non-government resources to finance schooling, one of which is private schooling. Despite the fact that private schools exclude the poor and strengthen existing inequalities by only giving the privileged sectors of society access to education, in low per capita countries like Eritrea, private sector investment can play an important role in reducing system level inefficiencies. The state can save on school building and teacher salary expenses, which it can use to improve teacher training and textbook production. Private schools can also help to reduce the high student teacher ratios in public schools. In addition, the existence of private schools alongside public schools can provide a benchmark against which public schools can measure their own performance.

Other factors that impact on the functioning of the Eritrean education system are the long school holidays and very little observation of time-on-task¹³ by teachers. Generally, Eritrean schools close for three months every year between the first of July and the third week of September, with two one-week semester breaks in between (one week after the first semester exam and one week after the second semester exam), plus many religious and national holidays. Furthermore, for schools in general and rural schools in particular, the start of teaching at the beginning of the year may be delayed by problems of students who don't come on the first day for registration. Many teachers who do not live locally arrive late for the start of the school year. The school day is very short – a maximum of four hours of learning time. Therefore, Eritrean pupils have insufficient time-on-task relative to many other countries. According to the World Bank (2003:3), the average primary school year in Eritrea comprises 720 clock hours compared to 800 to 950 in OECD countries. Other issue draining the state's fiscus is the recruitment of expatriate teachers who cost eight times as much as an Eritrean teacher. At present 19 percent of the secondary school teachers are expatriates (World Bank 2003:4).

¹³ Most of pupil's learning time is wasted in non-learning activities, such as school assemblies, student disciplining, and out of classroom activities, which have little direct bearing on learning, staff meetings, developing the time table, cleaning the compound by pupils and absenteeism by teachers and students.

The way primary school teachers are recruited is a cause for concern. Those who join the ranks of primary school teaching are those who are deemed not good enough for any other profession. They are mostly matriculation exam failures and most of them are simply assigned to be trained as teachers by the government often without their consent. This results in a high teacher turnover, absenteeism and absence without leave and low quality teaching. In addition, due to the national service years during which teachers have to work with only a subsistence allowance many teachers are forced to do additional work to supplement their income, causing them to neglect their teaching assignments. The consequences are low overall educational quality, which directly affect repetition and dropouts rates. In brief, all these factors pointed to above make the unit cost of schooling in Eritrea very high and the system as a whole wasteful and inefficient.

So far I have made an attempt to sketch the picture of the system level inefficiency by focusing on some of the core causes for high wastage. In the next part of this section, I discuss school level inefficiencies focusing on repetition and drop out. Eritrean schools are characterised by high repetition and drop outs rates. Table 6.1 below shows primary level repetition rate from 1991/92-2000/01.

Table 6.1 Primary level: Enrolment and repetition rate by gender 1991/92-2000/01

Year	Enrolment in primary level			Repeaters			Percentage of repeaters		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1991/92	150,982	81,746	69,236	N.A	N.A	N.A	N.A	N.A	N.A
1992/93	184,656	102,235	82,421	47,139	23,289	23,850	25.5	22.8	28.9
1993/94	208,199	115,663	92,536	41,694	20,632	21,062	20.0	17.8	22.8
1994/95	224,287	124,544	99,743	42,426	21,177	21,249	18.9	17.0	21.3
1995/96	241,725	133,471	108,254	49,172	24,470	24,702	20.3	18.3	22.8
1996/97	240,737	132,250	108,487	49,246	25,006	24,240	20.5	18.9	22.3
1997/98	247,499	135,569	111,930	56,157	28,613	27,544	22.7	21.1	24.6
1998/99	261,963	143,578	118,385	50,820	26,168	24,652	19.4	18.2	20.8
1999/00	295,941	162,896	133,045	57,366	30,798	26,568	19.4	18.9	20.0
2000/01	298,691	164,523	134,168	41,387	22,499	18,888	13.9	13.7	14.1

Source: Eritrea: Essential Education Indicators 2000/01

Table 6.1 reveals that even though the rate of repetition has decreased since 1991/92, it was still about 14 percentage points in 2001. With regard to female repetition, the table shows that it went down from as high as 28.9 percent in 1992/93 to 14.1 percent in

2000/01. The decrease of 14.8 percent is remarkable. In terms of numbers, however, 41,387 students repeated grades in 2000/01. With regard to drop outs the system is suffering from high rates of drop out. Table 6.2 below shows percentages of dropouts by year and gender.

Table 6.2: Percentages of primary school level dropouts in Eritrea

Year	Total	Male	Female
1997/98	6.5	6.7	6.2
1998/99	9.1	9.4	8.
1999/00	13.0	13.3	12.7
2000/01	6.3	6.5	6.1

Source: Eritrea Essential Education Indicators

Table 6.2 underlines the extent of primary school wastage due to drop out from the system. Dropout varies from as low as 6.3 percent in 2000/01 to as high as 13.0 percent during 1999/2000 school year. As shown in Table 6.2, drop out is higher for males than females at the primary level in Eritrea. One can assume that drop out increased from 6.5 percent in 1997/98 to 13.0 percent in 1999 as a result of the border war with Ethiopia that erupted in 1998, which left many people internally displaced. If we add together the withdrawal figures and the repetition figures we can see the extent of wastage in the primary education system. The amount of wastage from withdrawals and repetition for 1997/98, 1998/99 and 1999/00 was 29.2%, 28.5% and 32.4% respectively. However, dropout poses more serious problem than repetition because it implies that children's school careers come to a halt and that they may be lost to further possibilities of education entirely.

6.4 Regional and gender disparities in achievement and efficiency

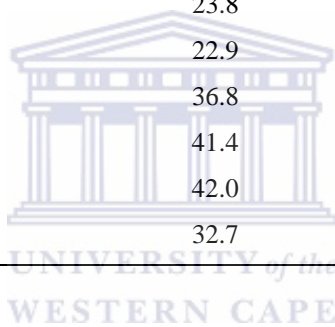
Disparities in achievement and efficiency are defined in terms of repetition and drop out, and examination results. Carron and Chau (1981: 65) suggest that despite the non-standardization of examinations, dissimilar marking criteria and discrepancies in awarding marks by different examiners, examinations play an important role as indicators

of scholastic achievement. For example, in 2001 the MOE conducted a study to monitor learning achievement in primary education. The study was designed to show what percentage of the students in primary education obtained the minimum basic learning skills in core learning areas. Based on the findings of the study the report concluded that the massive effort exerted in expanding access is not producing the desired results (ESDP, 2005:21). It showed clear regional and gender disparities. Table 6.3 shows disparities in learning mastery levels by region.

Table 6.3: Learning Mastery Level by region

Region	Grade 3	Grade 5
	Minimum mastery level	Minimum mastery level
Anseba	55.9	40.4
Dehub	74.7	23.8
Gash Barka	34.2	22.9
Maekel	69.0	36.8
N. R.Sea	52.9	41.4
S.R.Sea	31.3	42.0
National	58.3	32.7

Source: adopted from ESDP 2005



From Table 6.3 we can see that at grade three level the two lowland regions of Gash Barka and Southern Red Sea attained 34.2 and 31.3 percent respectively, which is far below the minimum mastery level of 50%. Similarly, all the regions except the two highland regions of Dehub and Maekel were below the desired mastery level of 70%. This shows that there are wide disparities in educational achievement between the regions in general and between highland and lowland regions in particular. At grade five, however, the disparities in achievement between the regions were less marked, but the national average was considerably lower for grade five than the average for grade three.

With regard to primary completion rates, out of 67,550 pupils that enrolled in grade one in 1991/92 academic year only 28,803 made it to the second level (junior secondary school) five years later, which means that 38,747 pupils (57.4%) were lost to the system because of dropping out. From those who enrolled in grade one in 1992/3 only 47.9%

survived and joined the next level five years later. This shows the level of inefficiency of the primary school system. UNICEF (1994:103) indicates that under the present system, of the 100 who started grade one, only 12 finish grade eleven. Table 6.4 below shows primary school survival rates by year.

Table 6.4: Primary school survival rate

Year	Grade 1 enrollment	Year	Grade 6 enrollment	%
1991/92	67,550	1996/7	28,803	42.6
1992/93	68,770	1997/98	32,963	47.9
1993/94	64,527	1998/99	35,802	54.5
1994/95	62,914	1999/00	41,106	65.3
1995/96	65,110	2000/01	42,553	65.3

Source: Constructed from MOE statistical reports

Table 6.4 shows steady improvement in the survival rate as grade six enrolment went up from as low as 42.6% in 1996/97 to 65.3% in 2000/01. However, 30% of the pupils have been lost either because of repetition; drop out, or for the lack of school opportunities at the next level. In the Eritrean context, many pupils, specifically girls do not turn up in the next grade when they finish grade five (the final year of primary school). This is because of the non-availability of a school reasonably nearby or because of their being obliged to go out to work. Many rural girls are pulled out of the system by their parents to get married. These national averages, however, conceal the true picture of the extent of repetition at the region level. In Table 6.5 below I provide enrolment figures, the number of repeaters and repetition rates by region and gender.

Table 6.5: Enrolment, repeaters and % of repeaters by region 2000/01

Region	Enrolment			Repetition and % of repeaters				
	Total	Male	Female	Male	%	Female	%	Total
Anseba	45,249	25,404	19,845	3,271	12.9	2,718	13.7	13.2
Debub	101,438	54,842	46,596	7,166	13.1	6,536	14.0	13.5
G/barka	50,295	29,262	21,033	4,557	15.6	3,889	18.5	17.1
Maakel	75,858	38,531	37,327	5,145	13.4	4,102	11.0	12.2
N.R.Sea	22,225	13,941	8,284	1,910	13.7	1,355	16.4	15.1
S.R.Sea	3,626	2,543	1,083	453	17.8	288	26.6	20.4
Total	298,691	164,523	134,168	22,499	13.7	18,888	14.1	13.9

Source: MOE (2001) Eritrea: Essential Education Indicators 2000/01.

Table 6.5 above shows how the regional repetition averages vary from the national average. For example, although the national repetition rate for primary school level in 2000/01 is 13.9 percent, the Southern Red Sea region has a 20.4% repetition rate, which is more than six percentage points above the national rate. Similarly, the Gash Barka region repetition rate is 4.2 percentage points above the national average. In contrast, the Maekel region which is in the highland areas of the country has 12.2 % repetition rate which is 1.7% below the national average rate. The two regions with the highest repetition rates are situated in the western and eastern lowland areas of the country. Table 6.5 also shows that the percentages for repetition are higher for girls than for boys in all the regions. In fact in some regions the repetition variance between boys and girls is as high as six points.

As can be seen from Table 6.5, the Maekel region, which includes the country's capital city and its environs, has the lowest repetition rate. There are a number of explanations for the low repetition rates in this region. This region is comparatively economically well-off compared to the rest of the Eritrean regions. From discussions I had with teachers and my own observations it is apparent that many children get extra tutorial assistance at home, and their home environments are more conducive for learning. The parental literacy rate is higher in this region than in the other regions. The literacy rate

assessment survey conducted by the Department of Adult Education in 2000 indicates that the region has a literacy rate of more than 80%. Another factor that contributed towards lower repetition rate in this region is the fact that usually the more experienced and well trained teachers are assigned to this region. The Eritrean teacher deployment and transfer policy shows that new and inexperienced teachers start their careers in remote rural areas, and after some years move to regional capital cities, and finally to the country's capital city and its environs.

Another contributing factor to regional disparities in primary school repetition rates is the availability or non-availability of kindergartens. In Eritrea there is very limited and unevenly distributed pre-primary or kindergarten provision. For example, in 2000/01 there were 91 pre-primary schools in the country, 69 in urban areas and 22 in rural areas. In terms of region, 48 were in the Maekel region and 17 in Debub, which means the two highland regions, had 71% of the pre-primary schools in the country. According to the Early Child Education unit (ECE) and the regional education office of the Maekel region, the majority of children in this region start primary school after at least two years in kindergarten. This helps lay an educational foundation prior to entering grade 1. The other four lowland regions had 29% of the pre-primary schools between them. This is a contributory factor to the higher repetition rates in the first grade in those regions.

Table 6.5 shows that there is wide gender disparity in repetition by region with the three lowland regions having the highest female repetition rates. For example the Southern Red Sea region has the highest female repetition i.e 26.6 percent. This is 12.5% higher than the national repetition average of 14.1%) for girls. The Gash Barka region with 18.5 % female repetition rate is 4.4% above the national average. The difference between the lowest repetition rate of 12.2 percent for the Maekel region (highland) and the highest of 20.2 percent for the Southern Red Sea (lowland) is 8 percentage points. This demonstrates the fact that the lowland regions are less internally efficient in comparison with the highland regions.

According to Table 6.5, there is a higher male repetition rate compared to females in the Maekel region which is quite unusual in poor traditional developing countries. In this region, the male repetition rate at the primary level is 2.8 percentage points higher than female repetition rate. According to many school teachers I spoke to, and based on my own experiences, this trend is due to the region's urban influence, accessibility to community infrastructure that ease the domestic workload of girls', and the relatively better economic standard of the region. It may be that it is due to the availability of higher numbers of female teachers who serve as role models for girls and the higher parental literacy in the region.

I attempted in the first part of the section to depict the overall inefficiency of the system and in this last part of the section I sketched the inefficiencies of the system by discussing repetition at primary school level by region and gender. I also highlighted primary school level withdrawals by gender. Next in Table 6.6 below I look into the state of repetition by grade and gender in Eritrean primary schools.

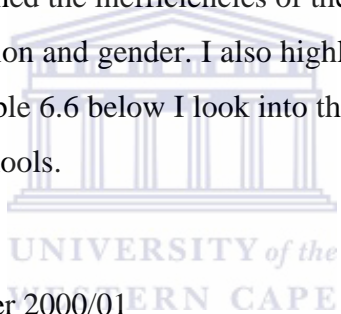


Table 6.6: Repetition by grade and gender 2000/01

Grade	Enrolled	Repetition	%	Male	%	Female	%
1	88,045	20,237	22.9	10,930	54.0	9,307	46.0
2	66,289	6,727	10.1	3,755	55.8	2,972	44.2
3	55,012	6,046	10.9	3,348	55.4	2,698	46.6
4	49,282	5,706	11.0	2,985	52.3	2,721	47.7
5	40,063	2,671	6.8	1,481	55.4	1,190	44.6
Total	298,691	41,387	13.9	22,499	54.4	18,888	45.6

Source: MOE (2001) Eritrea: Essential Education Indicators 2000/01

Table 6.6 shows that out of the total primary school enrolment of 298,691 students 41,381 students (13.9%) have repeated at least one grade. Out of the 41,387 students who

repeated in primary school in 2000/01, 20,237 (22.9%) are in grade one. Moreover, out of the 41,387 repeaters, 22,499 (54.4%) are boys and 18,888 (45.6%) are girls. The higher male repetition rate may be a reflection of the higher male enrolment. The repetition rate differs from a high of 22.9 percent for grade one to a low of 6.8 percent for grade five. The trend for repetition is that it decreases as the grade goes higher except for grade four where it went higher than that for grade three; only to drastically fall back again to 6.8 percent in grade five.

This has been the trend for repetition in primary school for the last ten years in Eritrea. The proportionally higher grade one repetition could be attributed to a lack of pre-school access. Another factor is that in most schools in Eritrea the weakest and most burnt out teachers are assigned to teach the first grade. In the next section of this chapter, I focus on the average primary school level length of study, survival and transition rates by region.

Table 6.7: Primary level survival, transition rate and average length of study per graduate by region 1999/00-2000/01

	Anseba		S.R.S		Debub		G.barka		Maekel		N.R.S	
	99/00	00/01	99/00	00/01	99/00	00/01	99/00	00/01	99/00	00/01	99/00	00/01
Survival rate for grade 2	85.8	88.7	91.8	80.7	73.1	88.9	62.6	86.6	94.8	92.8	92.2	86.5
Survival rate for grade 3	78.4	82.9	86.7	75.9	60.6	83.7	45.9	80.0	92.9	88.9	89.2	79.4
Survival rate for grade 4	71.0	77.1	83.1	71.1	49.6	78.5	35.1	74.3	90.2	85.2	86.6	73.9
Survival rate for grade 5	62.3	69.2	79.0	65.2	39.3	71.8	26.4	66.4	87.2	80.5	82.3	66.7
Transition rate to junior level	54.9	62.2	76.5	59.3	31.5	63.9	20.2	56.7	81.4	75.1	77.8	59.1
Average length of study per graduate	8.5	8.6	7.5	8.8	11.7	8.5	16.0	9.6	6.5	7.5	7.1	8.7

Source: Adopted from MOE Essential Education Indicators 1999/2000 and 2000/01.

Table 6.7 shows that there are substantial regional disparities in survival and transition rates in Eritrean primary schools. It also shows that it takes twice the normal five years to graduate from primary school. The table shows that the Maekel region has the highest transition rate from primary to junior secondary level and the shortest time per graduate. In contrast, the Gash Barka region has the lowest survival and transition rate and it takes more than twice the normal primary school years for a student to move through the system. For example in the Gash Barka region the survival rate for grade two is the lowest compared to the other regions. The rest of the regions have about 80 % survival rate for grade two. The Maekel region has above 90 % survival rate for grade two and about 80% transition rate to junior secondary school level. It also shows that only about half make it to the second level, i.e. the junior level. An additional point that emerges from the table is that there is a gap of between 6 and 7 points between the survival rate for grade five and the transition rate to junior level, which implies that there is either lack of access at the next level grades, or that students are obliged to go out and work. In short, Table 6.7 demonstrates that primary education provision in Eritrea is internally inefficient with most of the lowland regions being the most inefficient.

This section highlighted that high dropout and repetition rates are common features of the Eritrean primary education system. It also noted that the Eritrean education system is wasteful. The section further revealed that there is high primary school wastage due to withdrawals from the system and repetition, with the Southern Red Sea region having the highest repetition rate followed by the Gash Barka region. The section also showed that there are wide disparities between the regions in survival rate for grades, transition rate from primary to junior secondary school, and the length of years per graduate. With regard to repetition by grade, the section showed that the highest repetition was for grade one and the lowest for grade five. In the next section, I discuss the causes of educational wastage in Eritrea in general and the causes of repetition and dropouts in primary school in particular.

6.5 Causes for wastage and inefficiency in Eritrean primary schools

Children's school attainment is influenced by their innate abilities such as, study habits, attitudes and interest, motivation and self-concept and home and school environment. There are also several key social factors that affect the educational attainment of children such as low parental and student aspiration, early marriage, negative parental perception towards schooling, child domestic and wage labour and parental illiteracy. A number of research studies conducted in developing countries, (see Berstecher, 1972; Berstecher and Hill, 1990; and Colclough and Levin, 1993) indicate that the major causes for poor learner educational achievement and education system inefficiencies and wastage are the shortage of qualified teachers, inadequate physical and material conditions for learning, incomplete cycles of primary schools, an inadequate or irrelevant curriculum, inappropriate examinations that demand regurgitating factual information, and the high direct and indirect cost of schooling.

A supervision division workshop report (cited in UNICEF, 1994:98), indicates that the main contributing factors to high dropout and repetition in the Eritrean primary education system are: environmental and socio-economic problems, parents' negative perceptions about the usefulness of education, lack of guidance and counselling services, lack of properly trained teachers, poor pedagogical methods, difficulties with curriculum and assessment, incongruence between the curriculum and the students' needs and interests, and an inadequate supply of textbooks and other learning materials.

Similarly, the Eritrean education sector development programme (ESDP 2005: 23) identified demand and supply side factors that contribute to low learning achievement in the Eritrean education system. The demand side problems that impact educational achievement negatively are: poverty, child domestic and wage labour, parental interest, rural/ urban environment, distance from school and other socio-cultural barriers. The supply side factors identified by the ESDP (2005: 23) are a lack of competencies and qualification among teachers, inadequate school leadership, unconducive school

environment, large class size and overcrowding, short supply of textbooks, and poor readability of textbooks. In addition, problems with curriculum content were identified that include:

- lack of effective monitorable learning objectives,
- overload of the primary school curriculum,
- mismatch between cognitive demands of the curriculum and the learners' readiness and ability levels
- gaps and discontinuities in subject areas across the national curriculum, and
- out-dated and irrelevant content.

Moreover, the ESDP indicated that there was inefficient use of time, inappropriate teaching methods that emphasize lecturing, and poor language mastery by teachers. Having presented the broad pattern of Eritrean primary education inefficiencies in previous sections, I will now discuss the causes for disparities in repetition, dropouts and delayed progress through school in the primary school system in the sections that follow.

6.5.1 Causes for disparities in repetition and progress through primary school in Eritrea

As in many other parts of the world, disparities in repetition in Eritrea can be attributed to school factors, home environment factors and the child's innate abilities and efforts. Carron and Chau (1981:78) contend that repetition is primarily caused by the way the school system works. For example, the overriding school factors that hamper achievement in school are poorly trained and unmotivated teachers, a shortage of textbooks, poor school management and the absence of effective educational supervision. As alluded to earlier in chapter four (section 2.5), the teaching staff fell by 52% at independence. In response, the government hastily sent teachers into schools with very

little training. There is only one teacher training institute in the country and it lacks up-to-date teaching and learning materials and facilities such as a library, audio-visual aids and laboratory equipments.

The teacher education curriculum is unbalanced with little time allotted to pedagogy. Student teachers are recruited from those students with the lowest performance in their matriculation exam (UNICEF, 1994:100-101). It is assumed that poor preparation of teachers coupled with low teacher morale due to poor payment and low status in the community contributes to a low education quality and low student achievement. The majority of student teachers who are recruited for ethnic minority schools do not even have a high school level qualification. According to the (MOE, 2001:56), “It has been very difficult to find competent recruits with satisfactory secondary school leaving examination results therefore, secondary school level students were recruited.” Their mastery of the ethnic languages is questionable.

The teachers conference held in the port city of Massawa in February 2007 to discuss the state of the deteriorating Eritrean education system, identified the major factors for the deterioration of the system as; teachers’ low salaries, unappealing living conditions, and a general disrespect for teachers. The lack of school leadership is another factor that contributes to poor school achievement. Eritrean primary school principals are mostly untrained for their leadership roles. They do not provide pedagogical support to teachers, which are regarded as an important aspect to secure school improvement. According to the ESDP (2005:23) at present, many of the school directors and principals are inadequately qualified to provide pedagogical leadership. Though this affects the country at large, the most affected are schools that teach in the ethnic languages as there are very few qualified and experienced teachers to upgrade to head teacher level who would be able to lend pedagogical support to novice teachers.

Moreover, the absence of effective school supervision is another factor that contributes to low quality schooling and low promotion rate in Eritrean primary schools. The Eritrean supervision division is very weak, supervisors are poorly trained, ill-equipped, and without any real authority (UNICEF, 1994:101). Many teachers particularly in remote rural areas have never been supervised at all. In short, poor performing student teachers, poor training, inadequate pedagogical support and ineffective supervision of teachers have led to poor overall educational quality and low student performance. This severely affects the peripheral regions such as the lowland regions where there are no roads and public transportation.

Another school issue that affects promotion is the unavailability and poor quality of school textbooks. Many research studies conducted in developed and developing countries show that non-availability of textbooks results in poor academic performance of students (White 2004, and Henveld and Craig 1995). As I indicated in chapter four (section 3) of this thesis, Eritrean children rarely have textbooks of their own. A book is often shared by 5 to 10 children and as a result teachers often resort to writing much of the material on the blackboard for students to copy which negatively impact the use of time in the classroom. Moreover, the quality of textbooks is also very poor. For example, according to the primary school curriculum panel at the national curriculum division of the MOE, and based on my own experience as former staff member at the curriculum division, primary school textbooks in some ethnic languages are prepared by one or two individuals who themselves are not properly trained in either curriculum development or textbook production. Sometimes, textbooks are translated directly from the Tigrinya language textbooks to the rest of the ethnic languages. This is problematic as the translation of textbooks is done by non-experts in language or translation and with very little effort to adjust the textbooks to local circumstances. This leads to poor quality education and low promotion in regions that teach in ethnic languages.

Other school level factors that negatively impact promotion are limited time-on-task and outdated talk and chalk, and the teacher centred methods of teaching employed by the

majority of Eritrean primary school teachers. As noted in section 2 of this chapter, in Eritrean schools the day is very short – a maximum of four hours of learning time, and the average primary school year comprises 720 clock hours compared to 800 – 950 in OECD countries. This adversely affects the process of effective teaching and learning and results in poor teaching that culminates in low promotion rates and high repetition. Teacher centred pedagogy is the norm in Eritrean primary schools. A shortage of textbooks, limited teaching time, and poor pedagogical support from school directors and the absence of effective school supervision are major causes for poor achievement by students in school. In towns parents make up for these school-based shortcomings by hiring private tutors at home for their children, or by sending them to the mushrooming private tutorial schools in towns in the country. However, poor parents and parents in rural areas cannot afford private tutors, causing disparities in promotion between children from poor households and well to do families and between rural and urban areas.

With regard to home environment and its effect on promotion in school, it is vital to remember that the family's socio economic status, parental literacy, parental interest and socio-cultural factors are determinants of children's success in school. Literate parents have positive perceptions towards schooling and usually help their children with school work. Financially well-off parents provide their children with school materials that enhance their learning. In poor rural areas of Eritrea, children's domestic labour is vital, as they have to contribute towards the family income by working in the fields or by looking after siblings so as to enable parents to go out to work. Thus, Eritrean rural children in general and girls in particular are obliged to fetch water and firewood and help their mothers with house chores, and boys have to tend cows and sheep. Owing to this, promotion rates in primary schools are higher in the core regions of Maekel and Debub, while the lowest promotion rates are in Southern Red Sea and Gash Bark regions in the lowlands. This directly coincides with parental literacy rates and socio-economic status of the people in the respective regions.

Other home environment issues that affect promotion are poor nutrition and ill health. The majority of Eritrean children in the rural areas in general and in the rural areas of lowland Eritrea in particular are malnourished. And because of micro-nutrient deficiencies they do not perform well in school. Moreover, because of malnourishment, the unavailability of clean potable water, malaria, and other water born diseases, children are frequently absent from school and as a consequence under-perform in school and eventually drop out.

A number of crucial issues can be underlined pertaining to disparities in achievement in school between the sexes at primary school level. Eritrean girls in general and girls from minority ethnic groups in particular lack female role models to look up to. At primary school level the national percentage of female teachers is 40.6% and in some ethnic groups there are very few female teachers. The following table shows primary school teachers by gender and region.

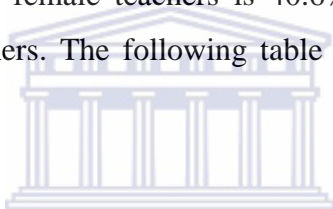


Table 6.8 percentages of female primary school teachers by region 2000/01

Region	Total	Male	Female	Female %
Anseba	1058	660	398	37.6
S. R.Sea	134	104	30	22.4
Dehub	2085	1217	868	41.6
Gash Barka	1131	806	325	27.7
Maekel	1677	749	928	55.3
N.R.Sea	583	422	161	27.6
Total	6668	3958	2710	40.6

Source: Eritrea Essential Education Indicators, 2000/01

As can be seen from Table 6.8, in the three lowland regions of Southern Red Sea, Northern Red Sea and the Gash Barka regions the percentage of female primary school teachers is less than 30%. The percentage of female teachers in these three lowland regions is 18.2, 13.0 and 12.9 points below the national female primary school teachers' average. As a result girls in these regions who are minority ethnic groups lack female role models and this contributes to the overall regional disparities in access to schooling. In the two highland regions of Maekel and Debub the percentage of female teacher is higher than the national average with the Maekel region having about 5%

Primary school textbooks have a substantial gender bias in favour of boys. A study conducted by the MOE (1997) revealed that proper nouns, common nouns and illustrations in primary school mother tongue textbooks showed the dominance of male names and characters. Likewise, an analysis of the gender content of pictures and illustrations in primary school science textbooks revealed very few female representations.

Another very important barrier to girls' achievement in school is domestic responsibilities. In the Eritrean socio-cultural context, girls, more than boys, are expected to carry out domestic chores such as fetching water, collecting firewood, looking after siblings and grinding work. Another feature of Eritrean primary schooling is that most teachers spend more time verbally addressing boys, directing questions at boys, explaining processes or ideas to boys, and disciplining boys than they do girls. A research study carried out by Kane (1996: 100) indicates that the correct responses of boys were rewarded more often than those of girls, and girls' correct responses were more likely to be passed over. In the case of incorrect responses, the responses of the boys were more often met with sympathy, while girls' responses were passed over. Eritrean girls learn that their achievement goes unrecognized and unrewarded which negatively impact their attitude towards scholastic achievement.

Parental aspirations and teachers' expectations also affect lower school achievement of girls. Many ethnic minority Eritrean parents' aspirations for their daughters are to get them married earlier, this is a cultural requirement. According to Kane (1996: 112), Eritrean parents do not see education as a solution to the goals they have for their daughters. Kane (1996:77) states that many parents see education as an obstacle to getting a husband for their daughters. Many teachers do not expect girls to excel and label them as less capable, which results in differential assessment and acknowledgement and contributes to girls' poor performance. To sum up, some of the key in-school causes for repetition and under-achievement in primary schools are ill-trained and unmotivated teachers, lack of pedagogical support and supervision of teachers by directors and supervisors, shortage and poor quality textbooks, limited time-on-task and low parental literacy. Furthermore, under-achievement of girls are attributed to the lack of role models, gender-biased textbooks, disproportionate domestic responsibilities, gender stereotyping by teachers and negative parental and teachers expectations.

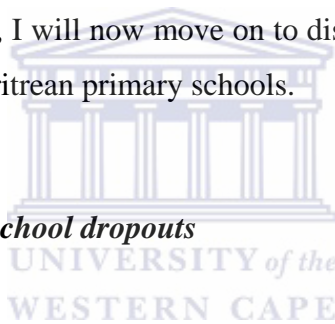
Repetition is the main cause of delayed progress through school which is measured by the 'years of excess' spent in school, i.e., the additional time taken over and above the normal amount of time to complete a school phase. In the Eritrean context years of excess are measured by the years a child takes to complete the five years primary school level. Elsewhere in this thesis I pointed out that on average it takes almost double the standard time of five years to graduate from the primary school phase in Eritrea. The high repetition rate in primary school indicates that progress through school in the Eritrean primary school system is very slow and uneven between the regions. Figures for 1999/2000 and 2000/01 show regional disparities in progress through school:

Table 6.9: Regional disparities in progress through school 1999/00-2000/01

Year	Anseba	S.R.Sea	Debu	Gash Barka	Maekel	N.R.Sea
1999/2000	8.5	7.6	12.0	16.0	6.5	7.1
2000/01	8.6	8.8	8.5	9.6	7.5	8.7

Source: Eritrean Essential Indicators

Table 6.8 shows that Eritrean primary school is not efficient by any measure. As can be seen from the table, it takes more than three times than the standard years as in the case of Gash Barka region and almost twice in the other regions to complete five years of primary schooling. The reasons for slow progress through school and the disparities between the regions are the same for those of repetition. The impact of slow progress through school, however, is that it limits the intake of new students that can be accommodated and widens the gap between gross and net enrolment. As overage children are kept in the system it overcrowds classes and increases the pupil to textbook ratio. Moreover, because of the age gap between learners, teaching and learning processes in the classroom becomes problematic. Because of pupils' slow progress through school quality is adversely affected, resources are unnecessarily wasted and drop out rates increased. Having shed some light on the impact of school and home environmental factors on school achievement in Eritrea, I will now move on to discuss those factors that cause disparities in the dropout rate in Eritrean primary schools.



6.5.2 Causes for disparities in primary school dropouts

Elsewhere in this chapter we have seen the extent of national level dropout-by year, grade level and gender. The dropout rate fluctuated from 6.5% in 1997/98 to 13% in 1999/00 and then dropped down to 6.3% in 2000/01. In the four years from 1997/98 to 2000/01, 97, 216 children dropped out of the primary school system. Dropout is an obstacle for the government's policy of universal primary education as it probably implies the end of a child's educational career. In terms of gender, more males drop out. In terms of grade the highest level of drop out occur in the first grade followed by grade four. Similar to that of repetition, students drop out of school due to poverty, poor health, lack of interest by students and their parents, incomplete school buildings, and distances from school.

In chapter five (section 6), I indicated that on average school children travel between five and eight kilometres to school one way which is very demanding for grade one pupils.

The fact that the highest rate of dropout in Eritrean primary schools occurs in the first grade suggests that distance is the main factor. Distance can also lead to girls dropping out of school when they reach puberty for safety reasons. Kane suggests that parents, “want physical, spiritual and cultural security for their girls; they do not want their daughters to lose their virginity, to ignore their religious heritage or to go outside the culture” (1996:112). The rate of dropout is higher in rural areas than in urban areas. This is because children start school in rural areas at nine or ten years of age because of the distance that they have to travel to school and therefore boys reach employable age and girls marriageable age before completing primary school. They are thus exposed to domestic pressures to work or marry much earlier and hence dropout of school earlier. In some rural areas schools are incomplete¹⁴ so children dropout or are pushed out of the system because of non-availability of succeeding grades in the school or in a school nearby.

Children dropout of school because of poor health. According to the MOE (2001:45), in many parts of the rural and lowland areas of Eritrea, children contend with frequent episodes of respiratory illnesses and diarrhoea during the school year. This results in frequent absenteeism and finally dropping out of the system. Early marriage is another contributory factor to dropping or withdrawal from primary school for girls. This is a common practice in the lowland regions and among the minority ethnic groups and it is one of the many reasons for ethno-regional disparities in schooling. According to Kane’s research study on education for girls, many parents feel that it is hardly worth the trouble of sending a girl to school since she will leave within a few years of entry (Kane, 1996:54).

An additional reason why there is a high dropout rate in some of the regions is people’s perception towards the benefits of schooling. Many pastoralists feel that their current economic activities provide a better income than that which could be achieved through

¹⁴ In complete schools are schools that do not have the full primary school cycle, i.e. (grade 1-5) either for shortage of teachers or classrooms.

primary education (Kane, 1996:55). Others feel that the current education system is irrelevant because their children couldn't even read or write a letter for them despite attending school (Kane, 1996: 55). And yet others claim not to have seen any benefits from sending them to school (Kane, 1996: 56). Thus, irrelevance of the curriculum contributes to the high dropout rate. Direct and indirect costs of schooling are additional factors that contribute to children being withdrawn by their parents. The perceived irrelevance of the curriculum coupled with high direct and indirect costs play a part in withdrawals from schooling by working children and children from poor households.

6.6 Conclusion

I argued in this chapter that the Eritrean primary school system is wasteful at the system-wide level. The chapter identified low quality education, underutilized schools and teachers, high construction costs and language in education policy as the major causes for the extant system level inefficiencies. I further suggested that the system is characterized by wastage based low completion rates, low pupil teacher ratio (particularly in lowland rural areas), and the under utilization of learning contact hours. I pointed out that wastage is higher in the lowland regions owing to disparities in repetition and dropout rate. Pertaining to high repetition rate the chapter emphasized that it was mainly due to low teacher competencies, shortage of textbooks, lack of pedagogical services and insufficient and ineffective supervision. In addition, the chapter pointed out that deficient home and cultural background and poor parental socio-economic status have a bearing on educational inefficiency. Likewise, I argued that absence of cultural advantage such as parental literacy, and the unavailability of supporting infrastructures in the home environment of minority ethnic groups who live in the marginal regions of the two Red Sea regions and Gash Barka adversely affect educational efficiency.

Furthermore, the chapter showed that there are substantial regional disparities in repetition with the Southern Red Sea, Northern Red Sea, and the Gash Barka regions

having the highest repetition rates. These three lowland regions have repetition rates of 6.5%, 2.2%, and 3.2% above the national average respectively. On the other hand, the two highland regions of Maekel and Debub have repetition rates below the national average of 13.9%. In addition, the chapter revealed that there are wide regional disparities in survival for grades, transition rate to junior secondary school level, and the average length of study to move through the primary school level. The chapter showed that the Maekel region for example has above 80% survival rate for grades, about 80% transition rate to junior secondary level, and it takes about 7 years to move through primary school in the region. In contrast, the Gash Barka region in the lowland area of the country which is home to many ethnic minorities has about 60% survival rate for grade five, the last year in the primary school cycle, and less than 50% transition rate to junior secondary school level, and it takes more than ten years to move through the primary school system. The chapter also revealed that primary school drop out is generally high, with the lowland regions having more dropout rates than the highland regions. In sum, the chapter showed that the Eritrean primary school system is internally inefficient and generally wasteful, and that there are wide regional disparities in repetition, drop out, survival for grades and transition rates, and the average length of study to graduate from primary school which have negative repercussion for equitable access. In the next chapter I pull together the discussions and finding of this study together into a conclusion and go on to provide some recommendations which I think would contribute in addressing some of the issues that brought about the current ethno-regional disparities in access and efficiency in Eritrean primary schooling.

Chapter 7: Summary, conclusions and recommendations

7.1. Summary

This thesis responded to two main research questions that inquired about ethno-regional disparities in primary school provision in Eritrea and how these disparities be accounted for. It also responded to a number of research sub-questions that asked how educational disparities evolved historically, the effect of previous uneven educational opportunities on various regions and ethnic groups, the measures taken by the state to rectify these disparities, the different policy instruments used to address these disparities and the current state of primary schooling in Eritrea.

The research established that educational disparities in Eritrea have a very specific history. During the Italian colonial period schools were designed along religious, regional, and ethnic lines. The meagre educational provisions during the respective colonial periods were confined to urban areas that were suited for colonial interests. Moreover, as both missionaries and the colonisers were basically interested in teaching males to use them as cheap labour and as priests and catechists, disparities in education emerged between the sexes. Missionaries and colonisers deliberately favoured particular ethnic and religious groups in the provision of access to schooling. This brought about disparities in education between followers of Islam and the Eritrean Orthodox church on the one hand, and Catholics and Protestants on the other. In addition, the colonial authorities and particularly the Ethiopians favoured the highlands to the lowlands, Christians to the followers of the Islamic faith and the Tigrinya ethnic group over the other ethnic groups. Because of this systematic and deliberate policy of favouritism ethnic and regional disparities in education emerged in Eritrea.

The thesis showed that after independence the government took a number of reform efforts to address educational challenges that it inherited from the consecutive colonial periods. In order to address these challenges the government enhanced girls' participation through sensitisation programmes, the use of female teachers and financial and non-

financial incentives. It also improved physical capacity through the construction of new schools and additional classroom. Moreover, the government tried to improve the quality of education by recruiting and training more teachers and organising them into clusters to improve their pedagogic skills. However, the thesis revealed that the reform effort by the government faced challenges such as the difficulties of implementing physical capacity expansion, changing the way parents see girls' education, and problems around communities' habitation patterns etc

Moreover, the research established that Eritrean primary school provision is ethno-regionally inequitable with the two highland regions of Maekel and Debub being the most advantaged in terms of number of schools and level of enrolment. In addition, the thesis further indicated that a breakdown of the regional averages reveal huge educational disparities between the sub-regions. With regard to disparities by language of instruction and ethnicity in primary school access, the thesis illustrated that the Tigrinya ethnic group has the lion share of primary school access in the country. Similarly, the thesis pointed out that the colonial and educational history, state and household level poverty, geographic and demographic conditions of the respective regions, language of instruction and the health and nutritional status of the respective ethnic groups, all played a defining role in the nature and extent of school access in the country.

The thesis argued that the Eritrean primary school system is wasteful, and identified low quality education, underutilized schools and teachers, high construction costs and language in education policy as the major causes for the extant system level inefficiencies. Pertaining to high repetition rate the thesis emphasized that this was mainly due to low teacher competencies, shortage of textbooks, lack of pedagogical services and insufficient and ineffective supervision. In addition, the thesis pointed out that deficient home and cultural background and poor parental socio-economic status have a bearing on educational inefficiency. With regard to regional disparities in efficiency the study showed that there are substantial regional disparities in repetition rates with the Southern Red Sea, Northern Red Sea, and the Gash Barka regions having the highest repetition rates.

7.2. Key concluding points of the thesis

This thesis has provided an analysis of disparities in Eritrean primary schooling between 1992 and 2001. The focus of the thesis has been on ethno-regional disparities in access and efficiency at primary school level. I have argued in the thesis that the current ethno-regional disparities are inherited from the country's colonial past. I have also argued that despite the government's commendable efforts to redress the inherited educational imbalances, the prevailing primary education situation is far from equitable.

The main conclusion that I have arrived at is that Eritrean primary school provision is regionally, intra-regionally and ethnically inequitable in terms of access and efficiency. Moreover, I concluded that because region, ethnicity and religion overlap in Eritrea, regional disparity in schooling is tantamount to ethnic and religious disparity. At the regional level disparities are observable in the imbalances of access to and success in schooling between the highland areas and the lowland areas, the Christians and the Muslims, Tigrinya and non-Tigrinya ethnic groups, those with a written language and those whose languages have not been written until recently. The configuration of disparities in schooling at the regional level has geographic, religious, ethnic and historical facets. At the intra-region level the disparities are between urban and rural sub-regions, nomadic and sedentary ethnic groups, and core and periphery sub-regions.

Educational disparities in Eritrea in general and ethno-regional disparities in education in particular are the result of historical developments under colonialism on the one hand, and the current day unequal distribution of economic opportunities and socio-cultural attributions on the other. These inequalities coincide with ethnic and sometimes religious divisions in the country, and are manifestations of inequalities in the underlying structures of the society.

The various missionaries and colonial powers who occupied the country favoured particular regions and ethnic groups. As a result, some ethnic groups and regions were at the receiving end of relative and comparative educational advantage. Education during

the respective colonial periods was dispensed to the indigenous population in small doses and selectively. Those regions and ethnic groups who were denied education became economically and socially disadvantaged. Therefore, the educational playing field for the various ethnic groups and regions were uneven.

The current disparities in education in Eritrea as they pertain to region, ethnicity, religion and gender were rooted in missionary activities and the colonial experience of the country. Missionary educational activities favoured Christians in general and followers of the Catholic and Protestant denominations in particular (Simonsen, 1997). This created disparities in education between Muslims and Christians and the highlands and lowland areas. Colonial educational provision and particularly under the Italians was very limited in extent, restricted to a few towns, and aimed at the sons of the local chiefs, noteables and native military commanders (Simonsen, 1997:104). This brought about educational disparities between boys and girls, urban and rural areas and between the poor and the well-to-do. Although the number of schools increased substantially during the Ethiopian occupation in comparison to earlier colonial periods, some sectors of the population preferred not to access the schools because they objected to Amharic a language of oppression as language of instruction. This further accentuated the extant imbalances between the regions and the ethnic groups.

Despite the Eritrean government's commendable reform efforts to redress the regional, ethnic and gender disparities in primary education that it inherited from the country's colonial past, the educational situation is far from equitable. Ten years after independence, 53.9 percent of all primary school-age children are still not enrolled in primary schools (Eritrea Essential Education Indicators, 2002). The majority of these children are girls, ethnic minority children, and children from poor households. The Eritrean education system is characterised by poor quality which manifests in low learning outcomes, high repetition and drop out rates, and slow transition rate (ESDP, 2005: iii-iv). To address the inherent inequalities within the Eritrean primary education system, the government decreed free and compulsory basic education, made ethnic

languages the medium of instruction at primary level, and gave priority to formerly underserved regions and rural areas and girls (see Chapter 4.2).

In spite of these equity driven reforms, the prevailing primary school provision is regionally, intra-regionally and ethnically inequitable (see Chapter 5.4 and 5.5). There are disparities in access to primary schooling between the highland and the lowland regions, and as well as between individual regions. Although the national gross enrolment rate is 56.5 percent, the two highland regions of Maekel and Debub have gross enrolment rates of 77.2 percent and 73.8 percent respectively. In contrast, the four lowland regions have far lower gross enrolment rates. For example, the two eastern lowland regions of Northern Red Sea and Southern Red Sea regions have gross enrolment rates of 28.9 percent and 9.8 percent respectively.

These regional averages similar to many national averages that mask regional disparities tend to distort the extent of actual provision at sub-regional level. To illustrate this point I analysed intra-regional educational provision in the Anseba and Northern Red Sea regions. Although the regional gross enrolment rate for the Anseba region is 68.8 percent, there are huge disparities between the sub-regions in the Anseba region. The gross enrolment rate for the Keren sub-region is 111 percent while that of the Sela sub-region is 7.8 percent. This shows that national and regional averages if not broken down, could actually disguise the profile of educational provision. My study challenges national policy decisions that are often made without a regional or sub-regional breakdown.

The extant primary school provision in Eritrea is ethnically inequitable. There are disparities in access to primary schooling between the country's ethnic and linguistic groups. The Tigrinya ethnic group which comprises about 50 percent of the Eritrean population is the most advantaged ethnic group in terms of access. 421 (56.7 percent) schools out of the total 742 primary schools in the country are Tigrinya medium schools (Eritrea Essential Education Indicators, 2000/01). In terms of enrolment, out of the total gross primary school enrolment of 298,691 pupils, 76.3 percent are made up of children

from the Tigrinya ethnic group. This shows substantial ethno-linguistic disparities in Eritrean primary school provision.

These disparities have historical, political, economic, socio-cultural, and linguistic histories. For example, the political ideologies and form of governments of the various colonial powers that ruled the country shaped educational policies and influenced the patterns of provision and distribution. Italy's colonial education policy of no education for the natives, Ethiopia's language of education policy that imposed the Amharic language, and the British policy of using Tigrinya and Arabic as medium of instruction in the country contributed to regional and ethnic disparities in education. Moreover, ethno-regional disparities in education emerged in the context of ethnic politics, in which politicians distribute government resources on an ethnic or regional platform that favours home region, own tribe or clan and withholding public resources such as education from other regions and ethnic groups.

In addition to the unfair missionary and colonial experiences that I alluded to earlier, the thirty years long war for independence between Eritrea and Ethiopia created a state of ethno-regional disparities. During the thirty years war of independence, in the rural areas in general, and the lowland areas in particular, which was a war zone education was brought to a standstill. Schools were closed or wrecked and teachers and students were killed, detained or conscripted (UNICEF, 1994). This widened the educational inequality gap between the regions and the ethnic and religious groups that lived in the war zone regions and the other parts of the country. Moreover, because of the inadequate supply of schools in some regions and for some ethnic/linguistic groups and the poor quality ethnic language education, some regions and ethnic groups are disadvantaged.

Furthermore, the nomadic way of life of some ethnic groups, the scattered settlement patterns, poverty and negative perceptions towards schooling by some sections of the population resulted in ethno-regional disparities. The majority of Eritrean ethnic minorities are nomadic or semi-nomadic. They perceive that schooling does not provide a better income compared to the current economic activities that they are often involved in.

They also feel that the current system of education is irrelevant because their children could not even write or read a letter to them (Kane, 1996:55). This brought about the low demand and under-utilisation of school resources in many rural lowland areas. Currently, about 36.7 percent of rural schools are under-utilised. Many schools in rural areas have a student population of less than 250 pupils (MOE, 2000:43).

Eritrean primary school provision is impacted by language of instruction, distance and children's poor health condition and inadequate nutritional status. In the lowland areas the average distance from home to school is 12.5 kilometres one way (MOE, 2000:41). This negatively influences enrolment and regular attendance of girls and is a major cause of early drop-out. Not all the ethnic languages in Eritrea are equally well developed. Some languages only recently developed scripts. It is very difficult to recruit teachers who can teach in these languages. This accentuated the historically generated ethno-regional educational imbalances between the ethnic groups and regions. Another cause of educational disparities is the opposition to mother tongue education by minority ethnic groups. These groups argue that learning in their minority ethnic languages will exclude them from political and economic development. They often demand to learn in a language that is functional, and that can empower them economically, and not a language that excludes them. As argued by Skutnabb-Kangas (1988:14) in a multi-lingual country to be able to take part in the democratic and economic processes people feels the need to have their children educated in the dominant language in the country.

It can be concluded that ethno-regional disparities in access to primary schooling in Eritrea are due to:

- the differentiated treatment of the different regions and ethnic groups by colonial authorities,
- cost difference of providing education to urban and rural areas, and
- difference in responsiveness to educational opportunities by the different population groups.

The Eritrean primary school system is not only disparate in access but unequal in efficiency terms. There are wide disparities in educational achievement between the regions and between boys and girls. Primary school provision is inefficient both at the system and at the school level as manifested by the internal inefficiency of the schooling system. Eritrean primary school learners' educational achievement is adversely impacted by shortage of basic school inputs such as, textbooks, lack of school leadership and deficient family backgrounds. Moreover, learner achievement is impacted differently by cultural and structural factors such as low parental literacy, difference between home and school culture and the way Eritrean schools are organised (see chapter 6).

Eritrea's primary school system is characterised by a high rate of drop out and repetition. A fifth of all pupils repeat each primary class and the cost per graduate is fifty percent higher than what an efficient primary school system would cost (UNICEF, 1997:9 and ESDP, 2005: iii). Schools are under-utilised and teachers are not optimally used (see Chapter 6.3). 36.7 percent of rural primary schools have less than 250 pupils. Schools that teach in minority ethnic languages have a very low school pupil ratio with teachers teaching only one session (MOE, 2001:43). Moreover, the Eritrean primary school system is deemed to be inefficient because of low time-on-task and high construction cost. The average primary school year in Eritrea comprises of 720 clock hours which is very low compared with other countries and the cost of constructing one classroom is more than US\$ 35,000 (World Bank, 2003:3 and ESDP, 2005).

Although repetition at the national level has dropped from 25.5 percent in 1992/93 to 13.9 percent in 2000/01 it is still very high. Drop out rates are also high averaging 7 percent (see Chapter 6.3). As to disparities in internal efficiency by region, the three lowland regions of Southern Red Sea, Gash Barka and Northern Red Sea have repetition rates of 20.4, 17.1 and 15.1 percent respectively, while the two highland regions of Maekel and Debub have repetition rates of 12.2 and 13.5 percent respectively (Eritrea Essential Education Indicator, 2000, 01). Pertaining to repetition by gender and grade, the study shows that more girls repeat classes than boys and the highest repetition rates were

in grades one and four. Moreover, my research shows that more boys drop out of primary school than girls in Eritrea. Pertaining to the average length of study per graduate, the study shows that it takes between eight and ten years to go through the primary school system of five years (Eritrea Essential Education Indicators, 2000/01).

The system level inefficiencies are mainly due to the state's school financing policy, language in education policy and teacher recruitment, training, remuneration and deployment policies. Regional and gender disparities in educational achievement were basically due to the poor quality of education, household level poverty, negative parental perception towards schooling and children's poor health among others (see Chapter 6.4). The Eritrean education system suffers from a shortage of qualified and motivated teachers, inadequate school leadership, shortage of textbooks and absence of effective and continuous monitoring and supervision (ESDP, 2005 : 23-24). These shortages mostly affect the peripheral regions and ethnic minority schools compared to core regions and the majority ethnic group.

The study argues that poverty related factors are a major stumbling block in access and efficiency in Eritrean primary schooling. Despite the fact that education is free in principle, the cost of sending a child to school is too high for many families. As a result, many parents either do not enrol their children at all or where they go to school they drop out before completing primary school. Girls and working children are the most disadvantaged. Ethnic minority parents' negative perception towards schooling, absence of a long standing experience of schooling among the minority ethnic groups, and poor quality education in most ethnic minority schools made schooling less appealing. Therefore, many ethnic minority groups do not send their children to school which lead to underutilisation of the schools that are available for these groups.

Early marriage and the shortage of female role models are some of the factors that negatively affected ethnic minority children's participation in general and girls' participation in school in particular. In addition, the study shows that poor health and malnutrition, which are common in rural areas of Eritrea affected learner educational

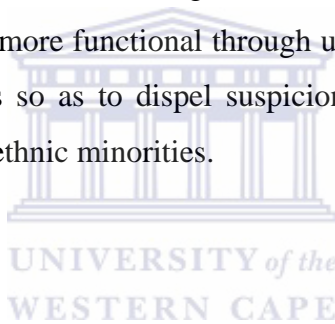
attendance and achievement, causing high repetition and drop out rates. These factors make the unit cost of primary schooling in Eritrea very high. In a nutshell, all the factors that rendered the Eritrean primary education system inefficient and wasteful such as the choice of language of instruction, costs of schooling, children's poor health and malnutrition, shortage of qualified teachers, lack of female role model for girls, parental cultural deficiencies, and early marriage are regional and ethnic issues and have ethno-regional basis, therefore, they affect the various regions differently resulting in ethno-regional disparities in schooling.

7.3. Recommendations

This thesis is based on the position that regional and ethnically based determinants of school access have to be key factors in future educational development planning. I believe the MOE has to:

- Identify policies and practices that can contribute to alleviating the existing ethno-regional disparities in access and efficiency in primary school provision.
- In expanding school access the MoE should give priority to formerly disadvantaged regions and underserved ethnic and religious groups.
- In collaboration with all stakeholders in education, the MoE should take the necessary action to overcome obstacles to participation and do all it can to make primary schooling more attractive and appealing to those regions and population groups who have still not been exposed to an equitable and efficient schooling system through sensitization programmes and role models.
- In order to cater for the needs of nomadic populations, the MoE should introduce mobile schools and to accommodate working children it should experiment with short school hours and long school year.
- In order to attract and retain quality teachers the MoE should pay competitive remuneration to teachers and provide them with conducive working environment.
- To improve the quality of education, the MoE should take all the necessary measures in the selection and training of teachers.

- In order for school directors to be able to provide the necessary pedagogical leadership to teachers, they should be selected from among the best and experienced teachers and should be given training in school leadership.
- To enhance the quality of education and to curb wastage that occurs as a result of repetition, the MoE should provide sufficient textbooks and make the school curriculum more relevant with emphasis on literacy and numeracy skills.
- In order to minimise wastage and under-utilisation of schools and teachers the MoE should construct smaller schools using local materials and labour and make use of multi-grade system schooling.
- Emphasis should be given to developing ethnic minority languages by standardising the language, improving the transliterated scripts and enriching the languages by writing textbooks and other reading materials.
- Make ethnic minority languages more functional through usage in administrative, political and economic activities so as to dispel suspicion of the government's language of education policy by ethnic minorities.



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