

An Empirical Study on Educational Finances in Eritrea : A Case Study on Central Region

RAVINDER RENA*

Abstract

Educational investment is an engine of economic growth and development in Eritrea while this is widely accepted, little empirical research has been conducted on the topic particularly on Eritrea. This study intends to delve and understand the global strategies of financing education, especially in secondary education and compare them with Eritrea to verify where Eritrea stands. This paper analyses patterns of educational finances in secondary education in Eritrea particularly in the Central region (zoba -Maekel). It presents data on selected secondary schools in Maekel region and other related data tables with the results observed during the study period and also focuses on the financing secondary education, especially in Maekel region. It also provides the pattern of financing both from public and other related non-governmental organisations. Sustainable public expenditure sourced through stakeholders and other income generating resources. External support systems and government subsidies can continue to support school education in the long in run.

I. Introduction

FINANCE IS THE lifeblood of the economy and it is one of the most important requirements for the development of education in any country (Mingat and Tan, 1986; Shri and Chowdhury, 1990; Rena, 2008; Todaro and Smith, 2009). Eritrea is no exception to this situation, but for a young country like Eritrea, finance is a scarce resource to spill around illogically without any scientific direction. This study intends to delve and understand the global strategies of financing education, especially secondary education and compare them with Eritrea to verify where Eritrea stands. This study also focuses the financing secondary education, especially in Zoba Maekel (central zone and one of the six¹ zobas/ provinces) in Eritrea.

Economists often state that Education is a cornerstone of economic development and therefore, educational investment is an engine that can

* Professor, University of the Western Cape, Department of Economics, Faculty of Economic and Management Sciences, Private Bag: X17, Bellville, Cape Town, 7535, SOUTH AFRICA.

drive economic development in any country particularly young nations like Eritrea. Admittedly, education is the key driver of the world economy. The crux of education is the transformation of ideas into economic opportunities that eventually lead to economic development. History shows that economic progress has been significantly advanced educated people with dexterity who are entrepreneurial and innovative, able to exploit opportunities and willing to take risks (Rena, 2008). It is therefore, educational investment is one of the important economic activities that can play a major role in boosting a country's economy (Bacchus, 1992; Rena, 2002:3). However, secondary education is a crucial one for the education system. This is where most primary school teachers are trained. It is also where the future students of higher education are selected and taught essential foundation skills. Students enter secondary schools as children and leave it as young adults. What they experience there will influence the course of the rest of their lives (Bray, 2000; Keith and Coillids, 2001). It is the level at which youngsters consolidate their basic knowledge gained in primary schools. But also where they acquire the common culture that will allow them to be useful citizen in a peaceful society, where they build knowledge through experience and experiments, where essential subjects such as science, health education and technology are first taught in a formal way (Windham, 1992). Finally this is where youngsters learn with much more maturity, how to think, how to be, how to work and how to cooperate with others.

Eritrea got its independence in 1991 after thirty years freedom struggle. It is located in the Horn of Africa, bordered in the North and West by Sudan, in the South by Ethiopia and Djibouti and in the East by the Red Sea. It has an estimated population of about 6 million. Since its independence, the country has been undertaking number of developmental programs in rebuilding its war-torn economy particularly education sector (Ministry of Education, 1996; Rena, 2006).

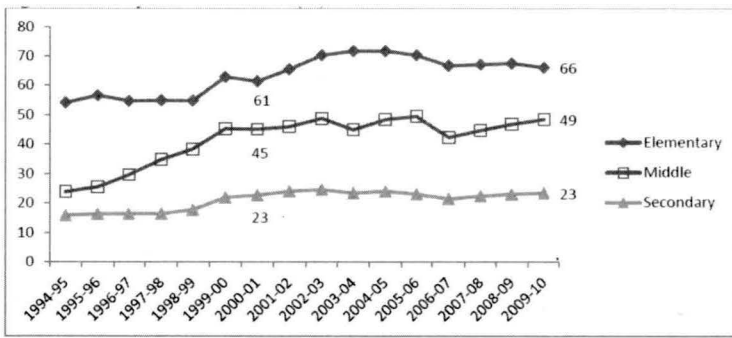
Eritrea became independent 23 years ago; therefore, the country is still at a primary stage of making its early steps in most of the sectors especially education sector. But the demands of public and their institutions are as intense as any other country. Demands of awareness, in personal and professional arenas, disaster management, employment, health, resource management, agriculture, industrial production, distribution, import export, banking, currencies, etc. have all to be met with professional expertise, even if the country is just born (Keith and Coillids, 2001). A mass of basic educated population cannot cater to the needs of these expert professional demands. A broad base and support of the secondary and higher educated masses is eminent for a developing nation like Eritrea.

II. Educational Background of Eritrea

The educational system in Eritrea shows all the symptoms of prolonged neglect under conditions of colonialism and war. At the time of independence, 84 per cent of the existing 190 schools were rated to be in serious disrepair. The remaining 16 per cent were far from providing a satisfactory learning environment. Disparity in the geographical distribution of schools was sharply marked. For instance, the number of secondary schools and students in the highlands was much higher than those in the lowland areas of Eritrea

(PGE, 1991; Ministry of Education, 1996; Hailemariam, 2000:129; Rena, 2006). Currently, more than 1150 government and non-government schools are functioning; however, most of these schools need lot of improvement, expansion and/or replacement.

Eritrea is still undergoing a process of rehabilitating educational institutions and services that were devastated during the long war (Government of Eritrea,1994). Decades of long conflict have led to the accumulation of a huge backlog of primary-age children who missed schooling. At the time of liberation, Gross Enrolment Rate (GER) at the primary school level stood at 30 per cent. However, it has increased considerably since independence (Rena, 2008:74-75).



Source: World Bank (2012) Eritrea Education Sector Investment Project Document of the World Bank, p57.

Figure 1
GER by level of education (%), 1994/95-2009/10

The higher-level objective of increasing access to schooling may well have been achieved, since there has been a drop in the number of repeaters and a possible contraction in the school-age population (World Bank,2012:57). The percentage of Gross Enrollment Rate (GER) increased by 5 at elementary and 4 by middle school during 2000-2001. However the Secondary school enrolment remained unchanged with 23% during the same period.

According to the World Bank report in Eritrea, girls’ share of enrollments has plateaued at around 45 percent at the elementary school level over the past ten years. This corresponds to a gender parity index of 0.81, assuming equal numbers of boys and girls in the population (World Bank,2012:18). However, three pieces of information indicate that the gender gap in elementary school is not quite as wide as those two figures would indicate: (i) the government’s own population data suggest there are slightly more boys than girls in the primary school -age population, so parity may be achieved already at a female enrollment share of 0.49; (ii) among students of official age for elementary school – i.e. excluding the overage students, of which many are boys – the female share of enrollments increases to 46 percent; (iii) the 2002 (Demographic and Household Surveys (DHS) indicates a gender parity index of 0.89 for all ages (based on the gross attendance rate of 94.6

percent for girls divided with 106.1 for boys) and a gender parity index of 0.95 for at -age pupils (based on the net attendance rate for girls divided with that for boys). All in all, it seems that the gender gap is narrower, and that it will partly self -correct when the older children leave the school system (World Bank,2012:18).

2.1 *Purpose of the Study*

The focus on achieving education for all after the world education forum in Jomtein (1990) has meant a singular emphasis on increasing enrolment in primary schools for many agencies and developing countries. Secondary education has been quietly neglected, squeezed as it is between primary education, the object of so much attention, and higher education, which has never really lost its supporters (Keith and Coillids, 2001;).

Yet, what to offer to young children graduating from primary schools is a growing matter of concern. As policies designed to ensure participation of all school age children in primary education start bearing fruits, and as a longer proportion of children complete primary education strong pressure will be felt at higher level of education system (Rena, 2007). How to finance secondary education expansion, how to organize it and what to teach at that level will be the burning issues for the years to come.

This study investigates the financial situation of secondary schooling in Eritrea and the study overviews the trends of school of financing in the developing countries and the income-expenditure status of a few sample schools in Asmara, the capital city of Eritrea. The study also looks at the national scenario of the expenditure on the education sector in different levels schooling.

2.2 *Objectives of the Study*

- i. To verify if this principles have any relevance and application in Eritrea;
- ii. To understand empirically, the situation of financing secondary education in Eritrea

2.3 *Limitation of the Study*

Asmara schools don't represent the cross sectional view of Eritrea. The socio-economic, culture and infrastructural status of the students and schools differ drastically with that of the other rural schools. But due to logistical reasons and convenience of data collection, samples from the rural schools were not taken up. A further study that includes samples from the other Zobas¹ would yield much wider results. This study has concentrated on the expenditure and the income analysis but could not study the qualitative improvements of the increased expenditures.

2.4 *Methodology and Data Source*

The study was initiated in the month of April 2004. The questionnaires were prepared and distributed to collect the data from different stakeholders. As is the problem with many questionnaires, return of the questionnaires was not very easy. However, thanks to the cooperative attitude of the school office bearers, the entire questionnaire was returned in time.

Data has been gathered from the Department of Finance of the Ministry of Education and four secondary schools in Asmara to understand the revenue, expenditure and needs situation of secondary schools in Zoba Meakel as a sample of the secondary schools of Eritrea. The following was the information collected and compiled in to tabular form.

Eritrea has terrible shortage of reference books. Getting suitable reference material was a Herculean task. However, thanks to the Internet and World Bank library, the researcher could get access to the recent documents.

III. Cost and Financing of Education in Eritrea

The Government of Eritrea (GOE) and its Ministry of Education (MOE) was preparing a longer-term strategy to improve the coverage and performance of its education and training sector. This includes an ambitious plan for achieving its "Education For All (EFA)" goals by 2010, while concurrently increasing net enrollment and completion rates at middle and secondary education and training levels over the next decade (WCEFA, 1990).

Annual education and training spending as a percentage of total government spending (and as a percentage of GDP, since GDP spending by the GOE was equal to 90 percent during 1998-2000) grew modestly from 4 percent in 1993 to about 5 percent in between 1998-2000. The Government spending as a percentage of GDP is estimated to drop to 55 percent by 2005. This creates negative pressure on possible private sector financing in human development. The GOE's dependence on support from the Diaspora² has shifted to dependence on donor aid to make these levels of government expenditures possible. The MOE's total education and training spending in the year 2000 amounted to about US\$8.3 million was capital spending. Donor support for pre-tertiary education and training amounted to about 85 percent of capital and 26 percent of overall spending. The UOA's budget is directly financed by the Ministry of Finance, and it spent about US\$3.5 million in 2000, of which 51 per cent was donor planning system based on informed political and management decisions. This hinders transparency, decentralization and priority budget decision-making (Rena, 2008).

It is recognized that EFA in Eritrea will require significantly increased the resource allocations due to geographic (reaching nomadic populations) and other problems. It would be beneficial if the MOE could select and agree on quantitative and qualitative sector performance targets for the longer-term. The first step could be a detailed cost and financing study of the education and training sector per level of education. Three financial scenarios are included in the main text to be used as a reference point for creating a sustainable planning and budgeting system based on priority policy decisions. One of the major policy issues in Eritrea is related to the sector's teacher and staff salaries, which in the year 2000 were in the range of 8-10 times or GDP per capita. Based on a comparison with other African countries and general trends in Organisation for Economic Cooperation and Development (OECD) countries, a sustainable wage policy for expansion of the present system would need to bring teacher and staff salaries to below at least 5 times GDP per capita. An unknown proportion of teachers at primary and middle level appear currently to draw a lower salary now as part of their national service. It is not known for how long this will continue, but it's phasing out, combined with a substantial expansion, will certainly inflated the MOE's wage bill. Significant expansion cannot take place if salaries remain at this unsustainable level. This will require a balanced wage policy for the sector, agreed with the major stakeholders. This issue is also linked to the lack of pension arrangements in the current system.

The major source of inequity in education and training spending comes through differences in spending per level of education. Per pupil spending at the tertiary level was the equivalent of US\$1,000 in 1999 (or five times GDP per capita), and in Technical Education and Vocational Training (TEVT) US\$880, compared to basic and general secondary education where per pupil spending was only US\$55. Since most of the poorest students do not make it to the university level or Eritrea Institute of Technology (EIT), these spending patterns suggest that children of families who are better off would receive significantly larger subsidies than children from poor families. More balanced spending is needed per level of education, relevant to unit costs, and improved resource allocation for school environment along with improved transparency of reporting on recurrent non-salary spending.

External funding plays a crucial role in overall spending on education and training in Eritrea. Donor funding has increased significantly during 1993-2005. Most donor involvement is concentrated on basic education and TEVT. The level of foreign donor support for the University of Asmara² is not known. Lack of donor coordination has led to unbalanced and fragmented development within the sector. For example, the neglect of general secondary education by donors has affected quality at this level. In addition, there is bound to be volatility of funding, creating problems for long-term strategic sector development. Eritrea will continue to be dependent on significant external donor funding and would need to (i) improve coordination mechanisms between and within the University of Asmara (UOA) and MOE, and (ii) start to establish better donor coordination mechanism based on agreed and realistic sector development strategies. The Diaspora funds could potentially be of great help to Eritrea's education and training. Mechanisms could be established to improve the monitoring of these external-funding streams, and incentives could be created to stimulate participation by private sources in the financing of services.

3.1 Macroeconomic Context

The economy of Eritrea has experienced considerable growth in recent years, indicated by an improvement in Gross domestic product (GDP) in October 2012 of 7.5 percent over 2011³ However, worker remittances from abroad are estimated to account for 32 percent of gross domestic product⁴. Eritrea has an extensive amount of resources such as copper, gold, granite, marble, and potash. The Eritrean economy has undergone extreme changes due to the War of Independence.

In 2011, Eritrea's GDP grew by 8.7 percent making it one of the fastest growing economies in the world.⁵ The Economist Intelligence Unit (EIU) expects it to maintain a high growth rate of 8.5 percent in 2013.

Although, the real economic progress was made in Eritrea between 1992 and 1997, when broad-based macroeconomic reforms caused average annual GDP growth rates of 7 percent. But this promising start came to a halt in 1998 when a border conflict with Ethiopia escalated into a full pledged war on 6 May 1998. During the war years (1998-2008) and immediate aftermath, macroeconomic conditions deteriorated rapidly. The border conflict also put a strain on the government budget. It was reported that the Government spent almost USD 1 million per day during the war period. Total government spending, traditionally high, rose to almost 100 percent of GDP by 2000. Prior

to the conflict, government spending already averaged 64 percent of GDP. Defence spending rose from 13 per cent in 1997 to an average of 38 percent of GDP during (1998-2000) due to the border conflict with Ethiopia (Rena, 2006).

As a consequence, education spending stayed stagnant and was sustained largely by the largesse of external donors. Rebuilding social and economic progress will require: i] A broad education and training sector reform; ii] Establishment of sustainable sector financing accompanied by a modern budgeting process; iii] Strengthening the central and Zoba management and skill base, and iv] Building public-private partnerships at all levels of education and training. An additional element is the need to improve coordination and public funding arrangements between the MOE and Higher Education (University of Asmara, EIT). Building a privatized system of higher education and vocational training, based on regulatory and financial incentives from the government, should be seriously considered. This could be achieved by 2015 in line with the Millennium Development Goals (MDGs) if the GOE embarks on a strategy in the coming years.

Given this background, there are several questions this paper seeks to answer. The first question refers to spending. How much is spent on education and training, who spends it, what is it spent on, and how efficiently is it spent? In particular, in light of the Eritrea's ambitious "National Objectives" (Government of Eritrea, 1994), how adequate is the financing for education and training? The second set of questions concerns sources of revenue. What financing instruments are used, what are the levels of subsidies, cost recovery, and private sector provision? Related to this, how much does education cost parents? Finally, a number of scenarios have been developed which explore how much it would cost to expand the system and improve quality of basic and secondary education. An examination of these questions provides the basis for looking at common, but complex priorities and trade-off in the education sector.

IV. Educational Expenditure Norms and Procedures

Eritrea's budget process is not an integral part of its strategic policy making. The MOF currently requires separate units such as Departments in the central MOE, regional education offices (Zobas), and individual schools to report their planned and projected expenditures separately. A committee then does approval of requests per line item from the MOF and the Office of the President. Existing budgeting norms are not conducive to the emergence of effective Zobas, and their capacity to do rational financing planning and setting priorities. The MOE began keeping track of spending across levels and Zobas in 1999 (Rena and Eyob, 2009). However, it is not possible to distinguish how much of the non-salary recurrent spending went to primary or secondary. And at the Zoba level, it was not possible to break down non-salary recurrent spending between, primary, middle and secondary levels, because the central MOE procured for schools at all levels and for all Zobas. Therefore, there is a need to simplify the reporting mechanism and coordinate and integrate program execution. There is no official budget presentation to define the spending priorities of the government. Line ministry managers do not have adequate autonomy to set priorities and execute their strategic programs, nor are they held accountable. This adds to the existing operational inefficiency.

The Table I, Table II and Table III, are exhibiting the eligibility, beneficiary, expenditure figures of four years since 2000, whereas Table IV shows, the data collected from the schools pertaining to the school strength, strength of the staff, expenditure and income details of each school.

Table I
Educational Expenditure in Eritrea

(in million Nakfa).

Year	Spending on Basic and Secondary Education					University of Asmara		
	Total Spending	Capital Spending	Donor's Contribution	% of total spending	% of capital Spending	Total Spending	Donor's contribution	% Donor's contribution
1993	10.8	2.5	2.5	23.1	100	0.9	0.3	32
1994	13.6	3.8	2.8	20.6	73.3	1.1	0.1	12
1995	18.1	5.1	2.4	13.3	47.1	1.3	0.3	19
1996	15.6	5	2.5	15.7	50	3.1	0.9	29
1997	25.5	8.1	5.8	22.7	71.6	7.2	1.5	21
1998	33.9	9.3	7.1	20.9	76.3	3.6	1.7	46
1999	34.9	13.4	9.7	27.8	72.4	4.2	2.3	56
2000	26.8	8.3	7.1	26.5	85.5	3.5	1.8	51

Source: Ministry of Education and University of Asmara various Reports and Bulletins

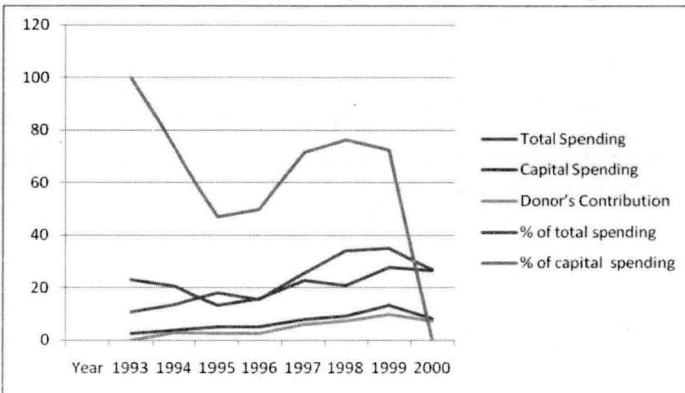


Figure 2
Educational Expenditure in Eritrea at Secondary Education in Millions.

3.1 External Funding of the Education

As indicated in Figure 3 external funding or donor contribution plays a crucial role in overall spending on education and training in Eritrea. The Table II below shows the donor and their level of commitment in 2000. There were several donors with widely varying commitments in 2000. The majority of the funding came from 10 donors and 73 per cent of commitments came from 5 donors. Danish International Development Agency (DANIDA) was the single largest donor accounted for one third of total external funding for that year. External Donors funding of basic and secondary education is mainly used for capital spending. The share of external funding in capital spending has increased in recent years from 50 per cent in 1996 to 86 per cent in 2000. Most donors' involvement is concentrated on basic education and TVET. Lack of donor coordination has led to unbalanced and fragmented development within the sector. For example, the neglect of general secondary education by donors has affected quality at this level. In addition, there is bound to be volatility of funding, which creates problems for long-term strategic sector development. Eritrea will need significant external donor funding for some time to come.

Table II
Different Donors and their Contributions to the Eritrean Education in 2000

Name of the Donor	US\$	Share of total donor contribution
DANIDA	2,419,050	33.1
ECDF	490,808	6.7
SIDA	686,982	9.4
KFW	637,536	8.7
NORAD	548,927	7.5
UNCDF	180,326	2.5
UNDP	358,420	4.9
UNHCR	113,396	1.5
UNICEF	728,211	10
WORLD BANK	895,438	12.2
OTHER DONORS	2,56,149	3.5
TOTAL	7,315,243	100

Source: Ministry of Education various Reports and Bulletins

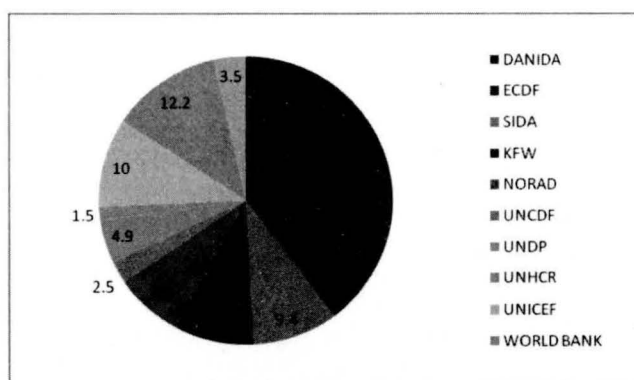


Figure 3
Eritrean Educational Donors and their Shares (figures in percentages)

Table III
Eligibility, Beneficiary and Expenditure in 2000-01

Level	Population			Expenditure in million Nakfa			
	Eligible	Benefited	%	Total	Recurrent	Capital	Per Capita
Primary	486,639	298,691	61.37	87.03	74.58	12.44	291.37
Middle	169,628	282,140	45.13	15.05	8.2	6.23	196.61
Secondary	282,140	63,951	22.66	26.67	9.06	17.61	417.18
Technical	—	1,434	—	9.56	5.41	4.15	6,672.54
TTI	—	883	—	5.74	5.74	—	6,506.64

Source: Ministry of Education various Reports and Bulletins

Table IV
Eligibility, Beneficiary and Expenditure in 2001-02

Level	Population			Expenditure in million Nakfa			
	Eligible	Benefited	%	Total	Recurrent	Capital	Per Capita
Primary	504,250	330,278	65.49	107.2	90.28	16.97	324.75
Middle	175,758	80,882	46.01	26.59	9.79	9.79	328.79
Secondary	292,355	70,183	24.00	73.46	10.08	63.38	1,046.77
Technical	—	1,992	—	9.56	7.32	15.44	11,429.52
TTI	—	922	—	5.74	4.6	—	5,045.92

Source: Ministry of Education various Reports and Bulletins

Table V
Eligibility, Beneficiary and Expenditure in 2003-2004

Level	Population			Expenditure in million Nakfa			
	Eligible	Benefited	%	Total	Recurrent	Capital	Per Capita
Primary	522,504	359,399	68.78	123.60	93.31	30.35	344.12
Middle	182,104	86,644	47.57	10.26	8.85	1.40	118.43
Secondary	302,938	72,812	24.03	160.80	13.56	147.32	2209.64
Technical	—	1,965	—	17.6	8.25	9.41	8991.97
TTI	—	834	—	4.4	4.4	—	5323.00

Table VI
Students, Staff and their Salaries in Selected Secondary Schools of Zoba Maekel.

S.No.	Students	Limeat	Harnet	Comprehensive	Red Sea
1	2000-01	1727	1756	3395	2617
	2000-02	1683	2028	3038	2965
	2000-03	1768	2229	2968	2791
	2000-04	1442	1991	2368	2251
2	2000-2001				
	Total Staff	47	50	70	66
	Teaching	41	36	60	53
	Non-Teaching	6	14	10	13
	2001-2002				
	Total Staff	49	56	67	65
	Teaching	40	40	58	52
	Non-Teaching	9	16	9	13
	2002-2003				
	Total Staff	47	65	70	67
	Teaching	37	48	58	54
	Non-Teaching	10	17	12	13
2003-2004					
Total Staff	43	68	72	67	
Teaching	33	48	57	54	
Non-Teaching	10	20	15	13	
3	Total Expenditure	268,957.15	192,720.00	202,027.00	113407.80
	Salaries	38,078.50	152,720.00	155,967.00	73922.45
	Administration	226,933.65	30,000.00	46,060.00	39485.35
	Capital	3,945.00	10,000.00	Nil	Nil
	Per capita staff salary	810.17	3,054.00	2,805.93	1692.00
	2001-02				
	Total Expenditure	364,753.07	189,080.00	224,096.00	137615.75
	Salaries	46,723.00	84,080.00	183,742.00	73992.45
	Administration	244,552.58	35,000.00	40,354.00	63623.30
	Capital	73,477.49	70,000.00	Nil	Nil
	Per capita staff salary	953.53	1,501.42	3,344.71	1138.34
	2002-03				
	Total Expenditure	474621.17	150,770.00	291,565.00	113768.45
	Salaries	44,964.70	75,770.00	259,930.00	73992.45
	Administration	426,493.85	35,000.00	31,635.00	39776.00
	Capital	31,638.12	40,000.00	Nil	Nil
	Per capita staff salary	956.69	116,566.00		1104.36
	2003-04				
	Total Expenditure	341,364.10	223,402.00	254,884.00	158886.45
	Salaries	45,924.10	88,402.00	230,506.00	73922.45
	Administration	278,479.00	35000.00	29,424.00	36354.00
	Capital	16,950.00	100,000.00	Nil	48540.00
	Per capita staff salary	1,068.00	130,000.00		1104.36
	2003				
Income	392,448.55	204,442.00	223,405.00	285658.42	
Fees	290,442.00	123,442.00	154,295.00	140000.00	
Donors	27,076.55	25,000.00	30,575.00	15000.00	
Rents	56,500.00	40,000.00	38,535.00	130658.42	
Transcript	6,430.00	6,000.00			
Id cards	12,000.00	10,000.00			
Inc - Exp	+123,491.40	+11,722.00	-31479.00	+126771.97	

Source: Primary Data

3.2 Analysis

- Examining the Table I, Table II, Table III, it is observed that the rise in the beneficiaries of all levels that is primary, middle and secondary is very marginal. But the expenditure raise in those three years is quite substantial and large.
- There is an increase of thirty million Nakfa in the first year and another 17 million in the second year in the primary level and about 10 million in the first year and a reduction of fifteen million in the second year in the middle school expenditure and about 50 million in the first and about 90 million in the second year school level. These figures can be interpreted as that there is a substantial increase in the allocation of money to the school education but it did not seem to be affecting the enrolment levels of all the levels of schooling. The primary enrolment (of the total eligible), rose from 61.37 per cent to 65.49 per cent in the first year and to 68.78 per cent in the second year. The rate of increase of the middle and secondary also is not very different from the primary. So it can be understood that the increased allocations have not been effective on the enrolment. A deeper understanding of the table reveals the shifted priorities.
- The Tables I to III show that in the primary level the extra-allocated money has been spent more in the form of recurrent expenditure in the first year and more the capital expenditure in the second year. These figures give us an assumption that there was more expenditure on the construction of school buildings in the year 2003-2004 and more expenditure on salaries of the teachers in the year 2001-2002 as a result of their return to school after the war time in the mid of 2000. Similarly in the secondary level there is a tremendous increase in the allocation of money over the three years. A close examination of the figures shows that while the recurrent expenditure is only marginal the capital expenditure is very large. It indicates that more money has been spent on construction and equipping of the secondary schools.
- Yet another interesting observation that can be made from the Table III, Table IV and Table V is about the per capita expenditure on each student in different levels. While the per capita expenditure on a primary school child, middle school child and secondary school student is Nakfa 291, 196 and 417 respectively. Further, it is Nakfa 6,600 on a technical school student and 6,500 on a (Teacher Training Institute (TTI) student in the year 2000-2001. Though there is an increase in the per capita expenditure over the three years, the difference among the levels seems to be constant.
- It can be observed that of all the levels, the per capita expenditure of middle school seems to be the lowest, which might indicate that middle school education requires a special focus.
- It is interesting to note that the per capita expenditure on a secondary school student has increased many folds over the three years period. While the per capita expenditure of a secondary school student in 2000-2001 is Nakfa 417, however, it increased from Nakfa 1,046 to Nakfa 2,209 during the period 2001 -2002 to 2003-2004. This is the result of the increased expenditure on construction.

- It should be noted that if we compare the expenditure of a secondary school student with that of a TTI or a technical student (TVET) the cost per student has been about 15 times in the first year, 10 times in the second and 4 times in the third year.
- It was also found that all the increase in expenditure of both primary and secondary education is without any increase in the number of students and teachers and quality of schooling.
- The tables also indicate that in the last one year there is a drop of 300-600 students per school. This happened because of the shift of grade 8 students to the middle school from secondary schools as part of the educational reforms in Eritrea in the year 2003-2004. It can be noted that despite the shift, the total expenditure of each school has not changed much, but there is an increase per child expenditure many folds.
- The administrative cost of many schools is exorbitantly high. However, Eritrean secondary schools must be one of its kinds in the world, which are making profits. This is revealed when we look at the income expenditure differences. This means that the cost of running a secondary school appears to be less than the income a school generates. This is despite the high cost of administration. Thanks to the national service teachers, Voluntary Service Organisation (VSOs) and cost bearing of Indian teachers by the International Aid agencies like UNDP and World Bank educational development project.
- It was interesting to note that resources of a school like tearoom and the grass grown in the school premises yields substantial amount of income to the schools.

IV. Results and Discussion

- It was found that the administrative and capital expenditure is exorbitantly high and the cost of salaries is comparatively very low in the secondary schools of Eritrea.
- It was also observed that the students collect money (other than the regular fees) and pay to the national service teachers who received Nakfa 145 – 450 per month for their sustainability. This has been practiced for a long time as recently as 2009 (Rena and Eyob, 2009). This becomes an extra burden on the children to pay two kinds of fees.
- The schools have resources that yield extra income. Some times these resources are good enough to bear the cost of the salaries. More ideas have to be thought of to exploit the resources fully and with much more efficiency so that the income from these sources is increased.
- It was a very unique situation in Eritrea that most of the schools surveyed during the study has surplus income. The surplus could be spent for the teaching resources or teachers' welfare.
- There is an increase in the amounts of spending on all the levels of education every year. However, this increase in the expenditure was not yielding any improvement in enrolment or achievement. Therefore, an utmost care must be taken to ensure the increased expenditure result in increased performance.

- It was also found in this study that the dependence on aid agencies is quite high. It might be necessary for Eritrea to find avenues for self-sustenance in due course of time.
- There was a high disparity in the expenditure per student across different levels of schooling. Though it is quite natural to find increased expenditure as we go up the educational level, the disparity seen in Eritrea is unsubstantially high.
- Increase in the expenditure per year on education was not proportionate to the increase in the number of schools in the country.
- The staff number also appears to be not increasing significantly despite increase in the beneficiaries. The student-teacher ratio in the schools is exorbitantly very high (1:65).
- The economic analysis of the Project Appraisal Document (PAD) of the World Bank (2012) did not calculate the Net Present Value (NPV) or Internal Rate of Return (IRR), but argued that investments in education are generally justified because they increase the productivity of labour and are associated with beneficial social outcomes. It also argued that public investment in education is warranted because of market failures that lead individuals to under-invest in education. (World Bank,2012:19).

V. Conclusion

The emphasis on education for all, all over the world has increased the inflow of students into secondary level (Balut, 2001; Duy, et al.,2001)). But the shortage of resources and expensive efforts has forced the interested students off the school and finally drop out of the educational system.

In Eritrea for an eligible population of 282,140 there are only 34 schools, which amounts to about 8,300 students per school and a teacher student ratio of 430 per teacher (Rena and Eyob,2009). This situation is very pathetic and there is a need for immediate expansion of number of schools, teacher availability, quality of education and access. All this requires capital and efficiency of utilization of funds. It was also observed that the investment on different levels was not yielding results proportionately. Care must be taken to improve the efficiency of the system and seriousness of the results.

The capital and administrative expenditure of Eritrean secondary schooling seems to be high and the GOE may consider lowering this expenditure so that the amount can be spent on qualitative improvement of the schooling and the welfare of the teaching community. It was good to see an increase in the per capita expenditure but it was heartening to see that this extra spending per child was not affecting the increase in the enrolment nor the quality of schooling. Hence, a special care should be taken to see the costs yield quality.

A major recurring cost of the school, the teacher's salaries was reduced in Eritrea because of its bearing by the national service staff or the international aid agencies. Eritrea has established a good precedence to the world of sustaining its public expenditure through sharing by stakeholders and

income generation from resources. Eritrean schools should search for more avenues of sustaining its expenditure from its own resources so that the dependence on external support systems and other subsidies can be less depended on.

Notes

1. There are six provinces/regions (Zobas) in Eritrea namely: Anseba, Central Province, Debub, Gash Barka, Northern Province, and Southern Province.
2. There are more than 1 million Eritreans have been living and working in the diaspora who may help in this regard provided a win-win strategy can be developed to encourage the diaspora and seek their support for this noble venture.
3. International Monetary Fund. <http://www.imf.org/external/country/ERI/index.htm>
4. Eritrea country profile. Library of Congress Federal Research Division (September 2005). This article incorporates text from this source, which is in the public domain. <http://lcweb2.loc.gov/frd/cs/profiles/Eritrea.pdf>
5. Daniela Kirkby (2011) Eritrea: Africa's Economic Success Story available at <http://inewp.com/eritrea-africa%E2%80%99s-economic-success-story>

References

Bacchus, M.K. (1992), "Meeting the Higher Educational Needs of Small States: Financial and Management Implications" *Journal of Educational Planning and Administration*, Vol. 6, No. 4, October 1992, pp. 373-400.

Baluut, Nanzaddorj (2001), "Educational Financing and Budgeting in Mongolia" Paris, IIEP/UNESCO.

Bray, Mark (2000), "Double-shift Schooling: Design and Operation for Cost-effectiveness" Paris, IIEP/UNESCO.

Duy, Pheng, Hang Sovonn, Yos Soly (2001), "Educational Financing and Budgeting in Cambodia," GOE, Paris, IIEP/UNESCO.

Government of Eritrea, (1994), "Macro Policy Document" Asmara, Government of Eritrea, Government of Eritrea.

Hailemariam, Petros (2000), "The Challenges of Educational Reconstruction and Transformation in Eritrea" in Teame Mebratu",

Jomtein, (1990), "Meeting Basic Learning Needs (WCEFA)", 1999 Final Report, Inter-Agency Commission for the World Conference on Education For All New York.

Keith, Lewin and Françoise Coillids (2001), "Financing Secondary Education in Developing Countries- Strategies for Sustainable Growth", Paris, IIEP/UNESCO.

Michael Crossley, David Johnson (eds.) "Globalisation, Educational Transformation and Societies in Transition", UK, Symposium Books, pp. 127-136.

Mingat, Alain and J.P.Tan (1986), "Financing Public Higher Education in Developing Countries: The Potential role of loan schemes", *Higher Education*, Vol. 15, No. 2 pp. 283-297.

MoE, (1996), "*Eritrea Quest for Education*", Asmara, Government Printing Press.

PGE (1991), "*Declaration of Policy on Education*," Provisional Government of Eritrea Asmara, Government Printing Press.

Rena, Ravinder (2002), "Financing and Cost Recovery in Higher Education: A Study with Special Reference to Private Colleges in Andhra Pradesh" *Finance India*, Vol.16, No. 2 pp. 662-666.

Rena, Ravinder (2006), "*A Handbook on the Eritrean Economy: Problems and Prospects for Development*", New Africa Press, Dar es Salaam, Tanzania, Printed in pp. 280.

Rena, Ravinder (2007), "*Higher Education in Africa - A Case of Eritrea*", New Delhi (India), *Journal of Educational Planning and Administration*, Vol. 21, No.2 pp. 125-140.

Rena, Ravinder (2008) "Financing Education and Development in Eritrea - Some Implications", *Manpower Journal*, Vol. 43, No. 1, pp. 73-97.

Rena, Ravinder and Kidane Eyob (2009) "*Eritrean Educational Reforms- Issues, Perspectives and Policy Implications*", The ICFAI University Press, Hyderabad, India.

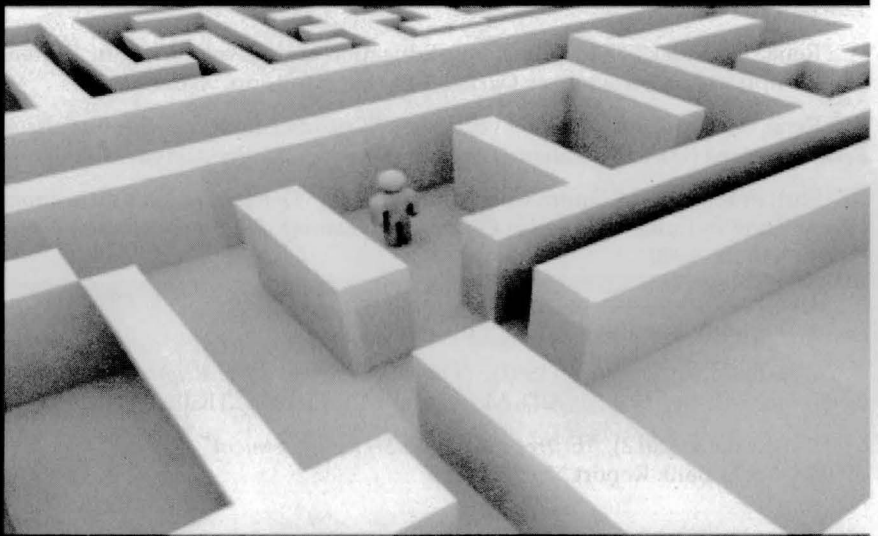
Shri, Prakash and Sumitra Chowdhury (1990), "Determinants of Educational Expenditure in India," *Journal of Educational Planning and Administration*, Vol. 4, No. 4 October, 1990.

Todaro, P. Michael and Smith C. Stephen (2009), "*Economic Development*" (Tenth Edition), London: Pearson Education.

Windham M. Douglas (1992), "*Education For All: The Requirements, World Conference on Education For All*", Monograph-III, Jomtein, Thailand

World Bank (2012), "*Eritrea Education Sector Investment*", Project Document of The World Bank Report No: ICR2025

Capital Structure Decisions



Under
Multiple Objectives
A STUDY OF INDIAN CORPORATES

Dr. Yamini Agarwal

Contact :

IIF PUBLICATION

Indian Institute of Finance

P.O. Box 8486, Ashok Vihar II

Delhi 110052, INDIA

Ph.: 0120-4340444

Fax: 011-27234473

Email: nl@iif.edu



Rs 950/- US \$ 80 EUR 50