

## **Education and human resource development in post-independent Eritrea: An explanatory note\***

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### **ABSTRACT**

Education is a lifelong process. Twentieth century has witnessed the miracles of Human Resource Development (HRD) activities reflected through increase in GNP and overall productive activities. The Government of Eritrea offering both formal and informal training programmes at different levels in order to develop the human resources. This prosperity in education is obviously a great thing for Eritrea, and the dream to make Eritrea a technological-oriented and advanced nation would become real, because the cumulative effort done so far in the human development is noteworthy. As Human Resource Development Programmes concentrate much on the category of major raw human resource to be processed into the work force and its role in reconstructing the economy. An attempt is made in this article to analyse the educational and human resource development after independence. This article also provides detailed account of technical and vocation education with special reference to skill development programme.

**Keywords:** *Education, Human Resource, Development, Eritrea, Technical education.*

### **INTRODUCTION**

Education plays a dominant role as an effective instrument for large-scale achievement and revolution in all spheres. Purposeful education enables the individual to understand and study the real life situation and to develop an opportunity for creating confidence in the minds of younger generation, and provide a strong base for rational and value-oriented and nation-building progress (Myers & Harbison, 1965; Mingat and Tan, 1986). Technical and vocational courses in higher education play a significant role in this context. Therefore, a close introspection of the trend of technical and vocational courses in higher education is essential, not only for making them attractive, but also in shaping them to be economically and socially relevant in Eritrea (Rena, 2004). Two highly commendable features, industriousness and steadfastness characterize the people of Eritrea. The Government is investing heavily on human resources development in the conviction that among its best resources are its people. Obviously, the courses in technical and vocational education are considered as utility-oriented subjects; however they involve heavy cost to the national exchequer of Eritrea (Government of Eritrea, 1996).

The World Bank (2000) acknowledged the importance of technical and higher education for countries not to be left behind in a global economy based on knowledge. Criticizing an analysis that measures the benefits of higher education solely in terms of incremental earnings accruing to individuals, higher education is regarded as 'simultaneously improves individual's lives and enriches wider society' (World Bank, 2000: 37). Further, education is a lifelong process. What a student obtains from the school and college is only a small part of the education that needs for the economic and social life of human being. Thus, both in the case of man who is determined to reach the summit, and the man who wants to make a complete success of his life, additional education is imperative to develop the special skills. Therefore, the education must be constant and continuous programme (Myers & Harbison, 1965; Bacchus, 1992, Rena, 2005c).

The twentieth century has witnessed the miracles of Human Resource Development (HRD) activities reflected through increase in GNP and overall productive activities in industrially developed countries. Even Eritrea has experienced the GNP growth rate of 7 per cent during 1994-1997. However, it decelerated due to border conflict with Ethiopia. Details are presented in subsequent paragraphs of this article. Human resource development (HRD) in itself can be understood in different ways: HRD in its broadest sense is an all-inclusive concept, referring to the process of 'increasing the knowledge, skills and capacities of all people in a society' (Tseggai, 1999: 216), encompassing in economic terms the accumulation of human capital, in political terms preparing people for participation in democratic political processes, and in social and cultural terms helping people to lead fuller lives, less bound by tradition (Tseggai, 1999). The dominant human capital theory has, however, narrowed HRD down to its economic aspects, or its human capital component (World Bank, 1995).

The role of higher education within the national HRD strategy broadly follows the pattern advocated by Thompson and Fogel (1976) for educational development in developing countries, in which higher education is strongly embedded into the national community as a whole instead of being an elitist institution which is removed from the realities of the majority of the population. The role of the university herein is that of a 'developmental university', an institution first and foremost concerned with the "solution" of the concrete problems of societal development' (Coleman, 1994: 334). Such a university sets out to 'ensure that the development plans of the university are integrated with or linked to national development plans' (Coleman, 1994: 343).

In Eritrea, having understood these phenomena, efforts have been intensified to accelerate the development process through different forward-looking activities including various human resource developments (Tseggai, 1999; Rena, 2005c). The Ministry of Education (MoE) has been playing very prominent role in re-building the economy through successful implementation of HRD plans depends substantially upon relevant policies and practices of other developed and developing countries apart from its own internal policies and constraints (Bacchus, 1992; Todaro, 1994). The noble achievement of this kind has been witnessed through the present educational programmes and reforms in the country. The MoE has its own frame work for the operation offering both formal and informal training programmes of different level notably the human resource development programmes.

### **Profile of the Country**

Almost one year after the declaration of Education For All (EFA) at Jometien, Thailand in March 1990, Eritrea got its independence on May 24 1991 after thirty years freedom struggle. It has an area of 46,770 sq mi (121,144 sq km) and has an estimated population of 4,670,000 (2005 est.).<sup>1</sup> 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. Its capital is Asmara. The population is composed of nine ethnic groups and the country divided into six administrative regions.<sup>2</sup> The population is about equally divided between Christians and Muslims. Like many African economies, the economy of Eritrea is largely based on subsistence agriculture, with more than 70 per cent of the population involved in farming and herding. It has the GDP (purchasing power parity) per capita income of \$900 (2004 estimates). The country's agricultural products include sorghum, wheat, corn, cotton, coffee, and tobacco. Cattle, sheep, goats, and camels are raised, and hides are produced. There is a fishing industry and some pearl fisheries remain in the Dahlak Archipelago. The country's natural resources include gold, copper, potash, zinc, iron, and salt, but they have not yet been exploited. Offshore oil exploration was begun in the mid-1990s. Eritrea has little manufacturing beyond food processing, textiles, and building materials. Many Eritreans work outside the country, and their remittances substantially augment the GDP.<sup>3</sup> Imports (consumer goods, machinery, and petroleum products) greatly exceed the value of exports

(livestock, sorghum, and textiles). The country's main trading partners are Ethiopia, Saudi Arabia, Sudan, and Italy (Rena, 2006).

The Ethiopian-Eritrea war in 1998-2000 severely hurt Eritrea's economy. GDP growth fell to zero in 1999 and to -12.1 per cent in 2000. The May 2000 Ethiopian offensive into northern Eritrea caused some \$600 million in property damage and loss, including losses of \$225 million in livestock and 55,000 homes. The attack prevented planting of crops in Eritrea's most productive region, causing food production to drop by 62 per cent. The erratic rainfall keeps the cereal production well below normal, holding down growth in 2002-04. Even during the war, it is observed that Eritrea developed its transportation infrastructure, asphaltting new roads, improving its ports, and repairing war damaged roads and bridges. Since the war ended in 2000, the government has maintained a firm grip on the economy. Eritrea's economic future depends upon its ability to master social problems such as illiteracy, unemployment, and low skills, and to open its economy to private enterprise so the Diaspora's money and expertise can foster economic growth (Rena, 2006). Since its independence, the country has been undertaking number of developmental programs in rebuilding its war damaged economy particularly education sector.

There are five levels of education in Eritrea, pre-primary, primary, middle, secondary, and tertiary. Education is as natural a right as the right to breathe. However, Eritrea pledged to achieve the universalisation of primary education and to increase the national literacy rate. The literacy rate is reported to be 57 per cent (Rena, 2005a). There are nearly 700,000 students in the primary, middle, and secondary levels of education (MoE, 2006). There are about 1100 schools and more than 12,000 teachers in Eritrea and two Universities (University of Asmara and the Eritrea Institute of Technology) as well as several smaller colleges and technical schools. One of the most important goals of the Eritrea's educational policy is to provide basic education in each of Eritrea's mother tongues as well as to develop self-motivated and conscious population to fight poverty and disease.

The methodology used in preparing this paper is both qualitative and quantitative in nature where the data has been collected from different reports, books news papers etc. The data mainly obtained from the reports of the World Bank, Ministry of Education, the government of Eritrea, and some Journals, newspapers articles published in etc. The paper is purely descriptive and analytical in nature. The organization of the paper is as follows: the first part discusses the introduction, importance of Human Resources and profile of the country. Second part provides Human Resource Development in Eritrea. Third part deals with the department of technical education and vocational training and the skill development programme in Eritrea. The final part provides concluding remarks of the study.

## **HRD IN ERITREA**

Before the independence of Eritrea, it is observed that the *Derg* regime had systematically dismantled the education infrastructure and the education system consequently degraded the education standard to one of the lowest even by African standard. It has acted as stimuli for rebuilding and resurrecting the overall nation's infrastructure and other facilities from the clutches of devastated and war ravaged economy and successive hostile colonial rule as well. Amidst severe fighting for freedom, the Eritrean People's Liberation Front (EPLF) had trained its members in different technical fields under apprentice programme. It is a clear indication that the GoE has had developed such a tendency to cater and by which the available human resource could be molded up to take up the struggling economy into the fruits of 21st century. The lack of regular maintenance of the infrastructure also meant that all institution buildings were in a state of disrepair (GoE, 1996; Tseggai, 1999; Rena, 2005b). It is difficult to believe some of the outdated, rigid and unfair system introduced by the consecutive colonial Governments is still maintained by an independent Eritrea.

Even after having started from the scratch, Eritrea has been unlucky in all aspects including its talented human resource as all most had fled into other countries because of 30 years bloody war. But still Eritrea has been trying its best to produce better human resources. It was mentioned in the Macro Policy Document in 1994, as in the long term, "Eritrea will be producing "knowledge intensive" goods and services able to penetrate the world market." The Government of Eritrea (GoE) has a strong, clear conviction that the key to rapid and sustainable long-term economic development rests with the development of human resources. The government emphasized the pivotal role of human resources in the development of Eritrean economy in the Macro-Policy Document (GoE-1994). The document details of the objectives and relevant policies of the major HRD issues: education and training, health, social welfare, rehabilitation of war victims and other vulnerable and disadvantaged members of the society, gender, youth, and population.

It is been realized that the country's most valuable asset is its people and the social solidarity present in Eritrean society, a society characterized by a high sense of community as well as a strong commitment to development (World Bank, 1994). Furthermore, it is intended to produce a society that is equipped with the necessary skills to function with a culture of self-reliance in the modern economy. The education system is also designed to promote private sector schooling, equal access for all groups (i.e. prevent gender discrimination, prevent ethnic discrimination, prevent class discrimination, etc.) and promote continuing education through formal and informal systems. Barriers to education in Eritrea include: traditional taboos, school fees (for registration and materials), the opportunity costs of low-income households, most institutions are still in the process of renovation and expansion; and lack of professionals to run the existing institutions properly is a serious drawback in the country (Rena, 2005c). Therefore, the main plan in developing its qualitative human resources in the country, at present, the majority of secondary education takes place in the academic line, so a first step is to have more technical and vocational secondary education. As far as higher education is concerned, after secondary school, students are supposed to go to junior colleges and only a very small number of students would go to the university for their degree (Muller, 2004).

Within the centralized HRD planning in Eritrea, this has certain implications for the workings of the university: after having passed the matriculation exam, subjects of study are allocated, and students' priorities are given only cursory concern in this process. According to these predictions, it is then decided how many students should be admitted to which department. For postgraduate studies the university draws up staff development plans and facilitates to send students abroad for education at Master's or Ph.D. level. In that way it hopes to assure that the country's human resources are used in the most efficient way. The success of such a strategy depends largely on a shared vision between the goals of the official policy side, embodied by the government and the university administration on one hand, and the people, the individual students, on the other. Without such a shared vision 'brain drain', which plagues many African countries including Eritrea that see their university graduates leave for the industrialized world where salaries are considerably higher, is difficult to avoid (Muller, 2004).

In line with this, the government is embarking to introduce a new education system that is firm and fair as well as flexible and of the highest standard. Thus, the Government has opened and planning to open many colleges in the country such as: a college of nursing and Orroto School of medicine<sup>4</sup>, agricultural College, a technical school in Massawa, and the Eritrean Institute of Technology at Mai Nefhi etc. In 2005, a Cabinet Ministers meeting, underlined the need to strengthen the colleges of science and technology in the country, but expressed no concern over the future of Asmara University. "We have tried to link the various colleges with the related development sectors. For instance, the College of Marine Biology has work relation with the Ministry of Fisheries and is located in Massawa, Northern Red Sea Region," the Minister of education Osman Saleh stated on the eve of University graduation day in July 2006. The number

students enrolled in degree and diploma programs is presented in *table -1*. Dramatic increase in the diploma programs in the colleges is noted. In terms of student population, at its peak the University of Asmara (UoA) had a student population of about 6,000, while the current total number of students at the tertiary level is about 12,000. In just a period of four years, the student population has doubled (Rena, 2005a ; MoE, 2006).

It is apparent that, the important assets of a country are its human resources. The effective utilization of its human resources is the crucial factor in determining the growth and prosperity of the economy of the nation. Further, the skill and talent of the individuals decide the optimal utility. Realizing the human factor in the national economy, the GoE has geared up all the possible ways to heighten up the level of required skilled employees for its thirsty economy. The immediate output which Eritrea bring forth through its visualization is found and experimented with the answer of planning and implementing clear cut and fast targeted HRD policies to ensure the optimization of available resources and developing them for the future challenges. This perhaps would mean formal and informal education, Technical and Vocational training, Industry-Institution linkage and inter-changeability of faculty etc. and these will have to be implemented to cope up with the fast changing social, economic and technical advancement (Rena, 2005b; Rena and Kasu, 2006). It is observed that, most of the HRD programmes of Ministry of Education (MoE) are being systematically and successfully carried out by the concerned institutions i.e. University of Asmara and Department of Technical Education and Vocational Training (DTEVT), which have been playing predominant role in the human resource development of Eritrea.

### **University of Asmara**

Since independence, the University of Asmara has been consistently raising the education standard and successfully introduced several new courses. In an effort to raise the educational standard to that of the international level and enable the university to introduce new courses, the GoE has spent millions of dollars. The University of Asmara offers various diploma and degree courses including Sciences, Arts and Language Studies, Business and Economics, Agriculture and Aquatic Sciences, Engineering, Education and Law (*see table-1*). Additionally, postgraduate courses in Literature, Agriculture, Business and Economics, Sciences and General Science offered beginning with the academic year 2004. The university can accommodate more than 2000 full -time degree students and about 700 evening diploma students. The University of Asmara had graduated students for the 14<sup>th</sup> time in 2006. Since independence, about 10,160 students of which 7096 in degree, 183 in advanced diploma, 2234 in diploma and 601 in certificate, have graduated from this higher institution of learning.

In an effort to alleviate overcrowding and enable the University of Asmara to introduce new courses, the GOE has spent 12 million Nfa in building a new campus at Halhale in Zoba Debub. This new campus at Halhale accommodates 1,000 students, offering up to seven different diplomas and nine certificate courses. This institute, for the first time has produced 434 graduates in numerous fields in 2004.

Sending students for higher education (Bachelors, Masters, and Doctoral Degrees) for upgrading their capabilities and expertise to other countries such as South Africa, India, Europe etc. is found to be high priority in the country. At present, Eritrea depends on expatriate teachers both at high school and higher educational institutions, however, to reduce the number of expatriate teachers at all levels is one of the important objectives of Eritrea. In line with this they are developing their own teachers by sending to other countries.

**Table 1: Enrolment of Students, by Gender and Type of Course from 1991/92 to 2002/03**

Academic Year	Students' Enrolment in University of Asmara											
	Degree			Diploma			Certificate			Total		
	F	M	T	F	M	T	F	M	T	F	M	T
1991/92	223	1619	1842	224	551	775	-	-	-	447	2170	2617
1992/93	348	1248	1596	173	391	564	-	-	-	521	1639	2160
1993/94	252	1824	2076	113	249	362	-	-	-	365	2073	2438
1994/95	338	2496	2834	59	186	245	-	-	-	397	2682	3079
1995/96	317	2526	2843	29	81	110	-	-	-	346	2607	2953
1996/97	252	2474	2726	37	329	366	15	52	67	304	2855	3159
1997/98	360	2304	2664	29	343	372	5	55	60	394	2702	3096
1998/99	471	2832	3249	32	537	569	37	139	176	540	3490	3994
1999/00	519	3074	3593	31	386	417	42	83	125	592	3543	4135
2000/01	596	3407	4003	20	422	442	45	138	183	661	3967	4628
2001/02	636	3897	4533	19	505	524	84	365	449	739	4767	5506
2002/03	613	4201	4814	74	515	589	86	445	531	773	5161	5934

Source: University of Asmara – Different Records

There is a Distance Learning Program, which was begun in 2002, when the University of Asmara signed a memorandum with the University of South of Africa (UNISA) to jointly set up this program. It is to be noted that as a part of HRD in Eritrea, the Eritrean Human Resource Development Program (EHRD) is awarding the scholarships to some of the eligible and deserved candidates. Currently, there are about 300 students for undergraduate courses and about 50 students for postgraduate courses are on the rolls. However, the programme is not successful due to the financial problems of Eritrea. As a result, less than 50 students have completed their studies in all levels.

It is to be noted that, for the first time in the country, the Ministry of Education has started open distance learning in March 2006 with the cooperation of the University of Asmara. It is reported that the program started for about 600 junior school teachers holding certificates and to upgrade them to diploma level. These teachers have come from all the six zones of the country. This is three years program, which aimed to upgrade the proficiency of teachers and offer quality education. It is to be noted that about Nacfa 40 million is allocated for the first batch. The second

batch of the open distance-learning program is expected to start in 2007, will target the remaining 1,400 certificate holding junior school teachers.

### **Asmara Commercial College**

Asmara Commercial College (ACC) under MoE, which offers advanced diploma and certificates programmes, was established in 1996. Although still based at Red Sea Secondary School Campus, this college offers various Diploma Courses including Accounting, Banking and Finance, Business Management, and Secretarial Science & Office Management to both regular and evening students. Since its establishment, 672 students in six batches were graduated (Rena, 2004). It is observed that the students who had completed their diploma from ACC, many of them are continuing their extension (evening) degree programme with the University of Asmara, however, it is very expensive process. Therefore, as part of the human resource development programme, the ACC can be updated to a degree level and/or affiliated with the Eritrea Institute of Technology (EIT) or University of Asmara. Thus, MoE and University concerned officials can consider the thought and resolve the problem. Therefore, the officials concerned have to be rolled out the welcome mat for the ACC advanced diploma graduates who are strongly aspiring to continue their higher education.

### **Eritrea Institute of Technology (EIT)**

EIT is considered as Eritrea's biggest boarding educational institute in a post-independence period of Eritrea. It is situated about 28 Kms south-west of the country's capital Asmara. It possesses more than 10,000 students and 350 faculty members (expatriates mainly from India, Eritreans of Diaspora, Graduate Assistants and the students of University service) (Rena, 2005c). It has a number of new and emerging departments; indeed, it is hoped that, EIT makes an institute of its own kind that will boost Eritrea's educational, technical and developmental standards manifolds in the coming years. This will certainly contribute towards nation building to meet the Millennium Developmental Goals (MDGs) set by the United Nations. It is observed that the institute is offering degree, diploma programs in numerous advanced disciplines that will serve the needs of Eritrea with its own human resources in the near future. Since it is a new institute, so far not produced any graduates however, there are an urgent need for the establishment of library and laboratories to equip the nation's youth with science and technology to enrich the institute to serve the nation better.<sup>5</sup>

### **DEPARTMENT OF TECHNICAL EDUCATION AND VOCATIONAL TRAINING (DTEVT)**

Technical Education and Vocational Training as one of the components of HRD are strongly believed to be the base for all the improvement process in the Eritrea's economy. In recent past, the DTEVT has proved itself as a change agent with the guidance of latest plans and policies, which was redefined in March 1997 as per the requirement of the Macro-economic policy of GoE in the TEVT Sector (Rena and Kasu, 2006). Its work is said to be tremendous and remarkable by rocketing the number of Technical and Vocational Institutes offering Advanced, Intermediate and Basic level of training programmes as Eritrea had only one Technical Institute in 1960's. At present, there are more than 20 Technical and Vocational Training Institutes including 8 Skill Development centers. Massawa Technical and Commercial School started functioning during the academic year 2005-2006 (Rena, 2005a).

**Table 2:** *Graduates of TVET at Intermediate Level Institutions of Eritrea by Gender During the Period 1991/92 to 2004/05*

Year	Number of Graduates		
	Male	Female	Total
1991	115	18	133
1992	120	23	143
1993	86	7	93
1994	205	31	236
1995	182	19	201
1996	130	12	142
1997	177	21	198
1998	164	25	189
1999	126	22	148
2000	252	44	296
2001	263	57	320
2002	443	80	523
2003	492	179	671
2004	434	90	524
2005	409	121	530
<b>Total</b>	<b>3,598</b>	<b>749</b>	<b>4,347</b>

*Source: Dept of Technical and Vocational Education – Various Reports.*

It is necessary to mention the clear-cut structure and the level of DTEVT for different category of training needs as such being followed in industrialized countries. The basic technical and vocational training level is to offer technical training to those who have completed the primary or junior secondary school and/or those who are not eligible to enter to senior secondary school. The main aim of this programme is not to throw even a single person out the National human resource employment frame (GoE, 1996). The skill development programmes fall in this category (Rena and Kasu, 2006). The intermediate level comprises of a formal training course devised for those who have successfully managed nine years of schooling. This level has given formal sitting to the students for two years in principle, but depending upon the types of courses, the MoE may decide to extent to three years. At intermediate level, there are 3 institutes including Winna Technical School, situated in Nakfa, the threshold in victory of EPLF during freedom fighting. Thirdly, the advanced level training programmes, the alternative for the University, accommodates students who have completed their Matriculation with more than 2 GPA. In this level, the DTEVT offers technical and commercial stream with well-tailored curricula and teaching methodology. The DTEVT at its level best has been turning out the caliber and well-matched human resource to the needs of the Eritrean Economy through all the possible efforts since 1991 (MoE, 2006). It can be supported by a statistical data of MoE, which reveals the sustainable improvement of DTEVT's capacity in producing the technical and commercial graduates increased tremendously.



**Table 3:** Graduates of TVET at Advanced Institutions of Eritrea by gender during the period 1991/92 to 2003/04

Year	Number of Graduates		
	Male	Female	Total
1991/92	0	0	0
1992/93	0	0	0
1993/94	0	0	0
1994/95	0	0	0
1995/96	0	0	0
1996/97	39	16	55
1997/98	0	0	0
1998/99	98	46	144
1999/00	139	58	197
2000/01	55	20	75
2001/02	87	20	107
2002/03	165	67	232
2003/04	160	32	192
2004/05	0	0	0
<b>Total</b>	<b>743</b>	<b>259</b>	<b>1002</b>

Source: Dept of Technical and Vocational Education – Various Reports

Note: There are two colleges at Advanced level- they are: Asmara Technical Institute and Asmara Commercial College, both these colleges did not produce any graduates during the academic year 2004/05 due to the government policy and restarted during the academic year 2006-2007.

It is during June- September that Eritrea harvests its fruit of educated manpower, from different educational institutions. During the academic year 2003-2004 as many as 724 students were graduated from various schools and colleges under the DTEVT. In the technical filed, Pavoni Technical Institute produced 22 graduates; Asmara Technical School - 166; Wina Technical School - 86; Maihabar Technical School - 122; and Don Bosco Technical School - 42. Whereas in the filed of agriculture, Hamelmalo Agricultural School and Hagaz Agricultural School produced 54 and 75 graduates respectively <sup>6</sup> (see table-2 and 3). Further, Asmara Teacher Training Institute produced about 525 trained teachers and Mainefhi Mother Tongue Teachers Training Institute has commemorated the Graduation of its 336 students. Asmara School of Music also graduated 26 students. The Tourism and Hotel Training School, established in 1998 has so far trained 657 personnel in basic tourism and hotel service skills. Uniquely, in Mekerka, Gash Barka about 300 females who attended a three-year course given by the Ministry of Justice, after completed their courses successfully graduated (Rena, 2005b). All these graduates are equipped with profound skills and knowledge in various technical and vocational fields relevant to the immediate need of the nation and entered in to the world of work. Further, education and in-service training for teachers and other professionals are being organized systematically in different fields. Generation of skilled manpower, in a balanced mix of general, technical/vocational education appropriate for the development needs of the country is the guiding principle in the ongoing developmental programs in the Eritrean education sector. This prosperity in education is obviously a great thing for Eritrea and its citizens, and the dream to make Eritrea a technological-oriented and advanced nation would become real, because the cumulative effort done so far in the human development aspects is becoming fruitful.

### **Skills Development Programme**

Enabling citizens through education and skill enhancement is more critical today than at any other time. There is fairly well founded concern that in the next decade the country could find itself performing a difficult balancing act: catering to the needs of a significantly growing population while trying to find opportunities for a newly emerging workforce of youth that does not have marketable skills. However, no nation can be exempted from the sufferings of illiteracy and unemployment. The degree of suffering may be different but their existence in an economy is unavoidable and uncontrollable (Rena, 2004). Unless a nation knows the ways to manage this ailment in a proper way, it would crop up as a major problem showing up an economy to the external world as a bad example. Having understood these consequences, the DTEVT has been making strenuous efforts in embracing the major portion of Eritrea's human resources like marginalized youth, returnees, ex-combatants, unemployed and unemployable communities (Rena, 2005c; Rena and Kasu, 2006).

Skill development programmes, are like converting raw human resource into the usable labour force transmitting the present ailing state into the very healthy one. Skill development programmes are the notable achievement of MoE, which successfully operates through different skill development centres all over Eritrea. It offers eight courses in the discipline of Productive Technology like building technology, wood technology, electrical technology, surveying, machine shop etc., Agriculture, Catering and home science and commerce with the flexible system of admitting students and length of training as well for about six months or even more. Once the student has successfully completed, S/he will be given opportunity to participate in Internship programme as a partial fulfillment of their training programme. Mai Habar Vocational Training Centre for the Disabled is one amongst the best centres in performing along with other formal technical training programmes.

It is observed that thousands of youth enter the workforce each year in Eritrea without the benefit of a high school education and most have no skills for the job market. However, most of them work under national service for a meager salary of Nakfa 450(\$30) per month. This must come as a sobering reality to those who are euphoric about the nation development. There is yet hope that the skills gap that separates knowledge workers from the school dropouts can be bridged with some innovative strategies and the political commitment to see them through (Rena and Kasu, 2006). Experts who participated in the United Nations Educational, Scientific and Cultural Organisation symposium on knowledge societies in Geneva endorsed the potential of Information and Communication Technologies (ICT) to take the education agenda forward in developing countries like Eritrea. ICT is more than just the Internet and encompasses the traditional mass media such as radio, television and even the telephone, which can deliver educational video and data. With such tools available, not a day can be lost in chalking out a national strategy for the labour pool (UNESCO, 2002; Yusuf, 2005).

The imparting of skills largely depends on the Industrial Training Institutes (ITIs) and/technical schools that have a base in the public and private sectors in Eritrea, besides, the State-run programmes, and NGO efforts. These are simply not equal to the task. The ITI system, despite some attempts at a revamp, is viewed as insufficient, its efficiency weighed down by factors such as a limited range of skills taught, outdated technology, high cost, and the requirement that those entering the system possess at least a high school qualification.

### **Some Challenges in Education**

Education in Eritrea has seen several challenges before attaining its present status. The Italians, the British and the Ethiopians have left their respective marks. The extensive educational reforms currently taking place at all levels is aimed at structuring education to respond to the development

needs of the country and to enable Eritrea to participate appropriately in this 21<sup>st</sup> century characterized by globalization and widespread knowledge based activities (MoE, 2006). The Eritrean education system faces challenges that are fairly common to other education systems in Sub-Saharan Africa. These are limited access; low quality; doubtful relevance; inefficiencies; inadequate financial and non-financial resources; and poor delivery capacity. The Government's vision for addressing these pressing challenges is well- articulated across key policy documents (Government of Eritrea, 2003:8).

Further, the challenge before the State, therefore, is to build on the existing infrastructure of ITIs, schools, colleges, institutions in the private sector, and NGOs. Computers and multimedia make it possible to learn in an interactive manner and these have to form the core of the new strategy. The potential of multimedia to train both literate and illiterate youth makes it all the more attractive. One vision of an ICT movement is to have a national network of vocational training centres, adopting the franchise model to extend coverage. Courses in the service sector areas such as tourism and health care could be taught at such centres, besides the existing schools and colleges. In a report on development choices for the 21st century, UNESCO and the International Labour Organisation point out that technical and vocational education is best served by a diversity of public and private providers, with the Government acting as a facilitator (UNESCO, 2002; Rena and Kasu, 2006).

It is believed that the government expenditure on education is expected to provide economic benefits in such as i] providing the basis for poverty reduction, overall human capital development, and accelerated economic growth; and ii] rationalization of public expenditures for the welfare of the people in Eritrea.

*i) Poverty reduction and economic growth.* Education is a key element of the government's strategy to reduce poverty. Weak system capacity, including inadequate physical infrastructure, insufficient numbers and untrained teachers, and limited management capacity for service delivery, has been one of the key factors responsible for unsatisfactory education sector performance, reflected in low enrollment ratios and poor education quality. Hence, the Government of Eritrea focuses on capacity enhancement for education service delivery at elementary, middle, secondary, and tertiary levels. The construction and rehabilitation of classrooms will enhance the physical capacity of the system to absorb more children into formal education. Strengthened teacher-training programs would enhance the human capacity of service delivery. Curriculum reforms are aimed at improving the relevance and quality of the education system. In the meantime, resources invested in strengthening the institutional capacity at the center and Zoba (province) level to ensure more effective and efficient system management. Thus, strengthening Eritrea's education system capacity is important from the perspective of economic growth.

*ii) Rationalization of public expenditures.* The Government's total spending on basic and secondary education was US dollar 33.9 million, 34.9 million and 26.8 million in years 1998, 1999, and 2000.<sup>7</sup> As stated earlier, between 2000 and 2001, MoE recurrent expenditure increased by 8 percent. Social and economic progress requires a broad-based education and training sector reform with the establishment of sustainable sector financing accompanied by an adequate planning and budgeting process (World Bank, 2003). Furthermore, it is envisaged that the education sector development program is also incorporated in the Interim Poverty Reduction Strategy Plan and integrated into the Medium Term Expenditure Framework prepared in 2004.

## CONCLUSION

The future questions to be addressed are whether the nation-centred education policies pursued by the Eritrean government in the context of its HRD strategy can succeed in a global world where opportunities for social mobility abound (at least for qualified young people with a university degree); and what consequences these policies might have for the level of social solidarity within Eritrean society. What can be witnessed in Eritrea is partly the result of a shift in the way education is conceptualized within the process of development. In shifting from a 'social-demand approach' to a 'manpower-demand-approach' the Eritrean government overlooks the fact that this will transform the values of Eritrean society towards more individualist ambitions (Muller, 2004). While a social-demand approach towards education entails the notion of cultivating social solidarity and forging national citizenship, a manpower- demand approach views education predominantly as a factor in advancing the nation in terms of international competitiveness. Overall, the HRD strategy pursued by the Eritrean government is in line with the human capital approach, the bottom line of which regards education as an investment which will eventually lead to increased productivity to benefit individuals and ultimately society. Education is herein seen as a panacea for development, which in increasing human capital will lead to other developmental gains (Muller, 2004).

Hence the development of relevant HRD policies must rely on well-researched and studied needs assessment of all sectors of the economy. Education, therefore, place the most vital role in developing the Eritrea's intellectual and creative power. Education is viewed as a strategic toll for development; therefore the content of the educational system is to be reviewed carefully and thus develop the human resources. Still Eritrea depends largely on the technicians and professionals from abroad. Thus, the education system in Eritrea must be geared up not only at raising the general, social and scientific knowledge of the individual but is must also equip the individual with skills that would enable one to lead a productive sustainable life. A well-thought-out policy has to be prepared to attract the Eritrean professionals in the Diaspora to return home.

As Human Resource Development Programmes concentrate on the varied categories of raw human resources to be processed into the work force, no one can deny and underestimate its valued role in reconstructing the economy. In line with this the relations between national and international actors in HRD have to be developed. Moreover, it is an inescapable fact that in respect of total manpower dispersion in business organizations whether productive or service, the bulk of the personnel are skilled labour force working at operative level. This force is instrumental in transforming raw materials into the products. It is this level at which major share of human resource investment and working capital are consumed. This is the force which produces quality and which ultimately affects the organizational image and the economy of Eritrea. The MoE/DTEVT can accomplish the desired objective through the skill development programmes that can build the skilled manpower and the economy of the country. Certainly, Eritrea would have a sound and healthy economy if it exploits and develops its natural and human resources that enables and boosts the economic development of the country. It can be viewed that the skills and knowledge that can and will change the shape of Eritrea's future.

## Endnotes

\* This article is a revised version of the Paper submitted (in absentia) for the IAABD International Conference held at Accra, Ghana, by the Ghana Institute of Management and Public Administration (GIMPA) from 23-27 May 2006.

<sup>1</sup> The population of Eritrea includes about 350,000 refugees from the Sudan. Every year hundreds of these refugees have been coming back to their homeland – Eritrea.

- <sup>2</sup> Eritrea has nine ethnic groups. They are: Tigrigna, Tigre, Saho, Afar, Bilein, Hidareb, Kunama, Nara and Rashaida. All these ethnic groups have their own languages and cultures. There are six administrative regions: Anseba, Debub, Maekel, Gash Barka, Southern Red Sea, Northern Red Sea.
- <sup>3</sup> This is anecdotal evidence that about 1 million Eritreans living in Diaspora are sending more than 500 dollars per annum. Some of these are studied in their home country. In this way, HRD is providing economic benefits to the country.
- <sup>4</sup> The Orotto School of Medicine, which opened in February 2004, produced some 83-health professionals by January 2006 and an enrollment of 1,200 students in the same year.
- <sup>5</sup> The eight new Colleges in Eritrea, offering university level programs (diploma and Bachelor of Science or Bachelor of Arts degree) started to be established commencing from the 2003/4 academic year. The first established one was the Eritrea Institute of Technology (EIT) located at Mai Nefhi. The EIT has three colleges, which are the colleges of Education, Engineering and Technology, and Science. The other new colleges are, the college of Agriculture in Hamelmalo (near Keren), the college of Health Sciences and the Orotta School of Medicine in Asmara, the college of Marine Sciences and Technology in Hirgigo (near Massawa), the college of Arts and Social Sciences to be located in Adi Kieh, and the college of Business and Economics to be located in Massawa.
- <sup>6</sup> All these figures are clubbed in the table hence the table does not represent the respective institutes mentioned in the text.
- <sup>7</sup> See *Eritrea Education and Training Sector*. It is to be noted that spending for basic and secondary education includes spending by the MoE and all other line ministries who are involved in education activities.

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