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## **LABOUR MARKET NEEDS AND DEVELOPMENT OF TECHNICAL AND VOCATIONAL EDUCATION IN ERITREA**

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### **Abstract**

*The imported models of technical and vocational education, which were developed in a context of economic growth, proved incapable of supplying skilled labour that met the highly varied requirements of Eritrean production systems. The TVET policies followed by the independent Eritrea are aimed at providing the managers and skilled labour, which Eritrea need to support the growth of the modern economy. The government of Eritrea has realized the shortcomings of education and decided to make Rapid transformation of the Education System and thus issued a concept paper in 2003 as part of its educational reforms in the country. TVET system in Eritrea is however facing some challenges to prepare a sufficient number of people with the right skills to meet labour market demands. In this context, an attempt is made in this paper to bring out the development trends in Eritrean TVET and the reconstruction of TVET system.*

### **I] INTRODUCTION:**

Technical Education and Vocational Training (TVET) plays a substantial role in the social and economic growth of any nation. It serves effectively the needs of the labour market in the country. It is to be noted that many countries have embarked on reforming their TVET system in terms of structure, management, financing and delivery.

In the 21<sup>st</sup> century, to meet the Millennium Development Goals, schools everywhere are being asked to prepare young people for the jobs of tomorrow, and TVET has an important role to play in this process. The multidisciplinary nature of TVET and its supposedly close links to the world of work make it one of the education sectors that contributes greatly to the training of skilled labour and gives both young people and adults the knowledge required to ply a trade. Indeed, for many it is a passport to employment and the possibility of social advancement. Technical and vocational education is therefore considered essential factor in Eritrea because the country cannot achieve economic and social development without a skilled, productive labour force that can meet the changing requirements of its environment.

However, TVET system in Eritrea is facing some challenges to prepare a sufficient number of people with the right skills to meet labour market demands. Matching skills, knowledge and attitudes to the needs of employment is increasingly challenging in the current context of globalization and rapid technological change due to the constant transformation of occupations. Therefore, it is a critical issue for TVET planners and managers is how to train individuals for future jobs on the basis of information covering past and present labour markets both within the country and outside.

This global dilemma is aggravated in Eritrea due to the permanence of adverse economic, social and educational conditions. Yet, the perceived supply-driven feature of most TVET system in Eritrea made the reform more urgent, as compared to other African countries. The main criticism of TVET in Eritrea included the excessive weight of public-sector provision, legacy of the manpower planning approach, often associated with low quality, high relative cost and poor external efficiency. It is observed that the external support to the TVET sector decreased after 1999 due to various political and economic reasons. Thus the implementation of major reforms in TVET system of Eritrea crippled (Rena, 2002<sup>b</sup>).

**Purpose of the Study:** Thirteen years later it is worth looking back to see what has happened in TVET in Eritrea. The reforms that have been implemented, sometimes with the support of the international donors Danida, GTZ DED, OBS (German), etc., and the World Bank took place in the new context of globalization. Furthermore, they were also undertaken, in most cases, in an adverse macro-economic context reflected in various dimensions such as international trade, the aggravation of labour market conditions and the increasing number of poor. In other words, the optimistic views expressed in the early mid 1990s on the future of Eritrea did not quite materialized. Today some of the most promising and dynamic experiences are threatened by the long-term impact of border conflict with Ethiopia during 1998-2000.

The methodology used preparing this paper is both qualitative and quantitative methods where the data is been collected from different reports, books news papers etc. The organization of the paper is as follows: the first part discusses the introduction, forms of TVET and profile of the country. Second part provides some review of related literature. Third part deals with background of TVET education in Eritrea. Fourth part emphasizes the development of TVET and reconstruction process and also provides results and discussion with some implications and the final part provides concluding remarks of the study.

In this context, an attempt is made in this paper to bring out the development trends in Eritrean TVET and the reconstruction of TVET system. A focus is placed on innovations in an effort to identify promising initiatives likely to contribute to the establishment of consistent TVET system, closely related to the world of work and involving labour market stakeholders. However, this work is not intended to be an evaluation of TVET system and its policies in Eritrea.

### ***Forms of TVET***

Models of technical and vocational education and training vary from country to country, and TVET programmes are provided by a broad assortment of institutions: technical and vocational schools offering short programmes, apprenticeship centers, polytechnics, university-level institutes of technology and so forth.

Various approaches have been adopted around the world to provide technical and vocational education within school systems. In Eritrea, both the mode of functioning and the content of TVET system are in most cases based on those of the former colonial power. Indeed, the ILO's World Employment Report for 1998-1999 describes the technical and vocational education sector in the African countries as 'School based', since pupils who wish to continue their schooling may remain in longer educational programmes, while other may attend vocational schools (Atchoarena and Delluc, 2002, p. 33). Some countries have 'pathways' to give the latter group access to higher education. However, in most countries, pupils who opt for vocational schools will arrive at a dead end as far as higher education is concerned.

### ***Profile of Eritrea***

Eritrea is one of the youngest nations in the world, which became independent from Ethiopia on 24 May 1991 after a debilitating war that lasted more than thirty years. It is located in the North East of Africa with a total area of 124,432 km<sup>2</sup> and a coastline on the Red Sea of almost 1000km. Eritrea, 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 4 million with a population growth per annum is estimated to be 2.9 per cent. It has nine ethnic groups and six *zobas* (provinces/regions).<sup>1</sup>

The country is a land of varied topography, climate and rainfall. It is an arid and semi-arid region consisting of a high plateau and coastal plains. Climate varies according to the different topographical regions, mostly hot and dry along the low lands and the Red Sea coast and cooler and more humid on the inland plateau. Average temperature ranges from 35<sup>0</sup>c in the low lands to 20<sup>0</sup>c in the highlands. The highlands have a moderate climate with minimal seasonal temperature variation. Temperature variations in the lowlands are much greater than in the highlands. During the hot and dry season maximum temperature can reach 45<sup>0</sup>c in the low lands and 29<sup>0</sup>c in the central highlands. Red Sea coastal plain, particularly in the Dalul depression in the Southeast that falls 100 meters below sea level is notable for having some of the highest temperatures recorded on earth. It can reach an extreme high temperature in the summer, with occasional highs up to 60<sup>0</sup>c.

The main economic stay of the people is agriculture of which crop production followed by livestock herding are the core economic activities. The agricultural sector employs about 70 percent of the working population, but its contribution to GDP is less than 22 per cent.

Technical and Vocational Education and Training (TVET) institutions play a great role in human resources development of Eritrea. The number of TVET institutions increased from two to eight after independence. The government of Eritrea fully

finances the recurrent costs of all TVET schools except two of the intermediate level. However, the largest share of the capital budget comes from the government and International Donors (Rena, 2005<sup>b</sup>).

## **II] REVIEW OF LITERATURE:**

Each country is in a different situation and has different concerns, and since responsibility for supervising the education system may shift according to the educational and political strategies of governments (Lannert, J. et al., 1999). It is, for example, the case of Senegal, where the Ministerial authority in-charge of TVE changed seven times in thirty years.

Some countries have divided responsibility for TVE among several Ministries, usually the Ministry of Education (responsible for organizing and managing initial technical training in co-ordination with general education) and the Ministry of Labour (responsible for vocational training of skilled workers and craftsmen).

Until recently, Cote d'Ivoire has a Ministry for Technical and Vocational Education, but since October 2000 technical education has been under the authority of the Education Ministry and vocational training under that of the Ministry of State with responsibility for vocational training and employment, which is attached to the Ministry of Labour, the Civil Service and Administrative Reform.

Even when there is a specific Ministry for Technical and Vocational Education, some vocational training programmes often remain under the supervision of sectoral Ministries: health, civil engineering, agriculture, transport, etc (World Bank, 1991).

Numerous criticisms of technical education and vocational training have been voiced over the past decade (World Bank, 1991; Moura Castro, 1999). They may be summarized as: i] poor quality; ii] very high cost; iii] training not suited to actual socio-economic conditions; iv] disregard of the informal sector's needs; and v] disregard of the labour market and of the high unemployment rate among graduates.

In view of the changes in the labour market, the objectives of technical and vocational education have become more diverse: they are no longer simply economic but also social, including the fight against poverty and the integration of young people into the world of work. In this context, two other major objectives are pursued: i] to train the workforce for self-employment and ii] to raise the productivity of the informal sector (World Bank, 1991; Moura Castro, 1999).

The fact that the system is ossified and impoverished makes it all the more difficult for technical and vocational education to take up the new challenges. Criticism of technical and vocational education has led to cuts in the volume of training provided in public institutions and to shifting more of the responsibility for providing initial vocational training to enterprises and private institutions (Middleton and Demsky, 1988).

Integration in the labour market is defined as 'a complex process that leads a person with no work experience to occupy a stable position in the employment system'. Research on the school-to-work transition in Africa is somewhat scarce. In general,

although some information about the number, if TVE pupils is available, most countries have no statistics on graduates' level of integration into the labour market, and the few surveys which are available date from the mid 1980s. A brief overview of the results of these surveys will provide a better understanding of the new challenges facing technical and vocational education in sub-Saharan Africa (Atchoarena and Delluc, 2002, pp. 47-49).

In many countries, the civil service was a major employer of TVET graduates. The 1985 survey on the school-to-work transition in Mali shows that half of all CAP holders were employed in the public sector. This sector played a strategic role in youth employment. The public sector hiring freeze that structural adjustment policies brought to Sub-Saharan Africa was a major cause of the worsening of the conditions of youth integration into the labour market. However, public-sector restructuring varies across countries. A tracer study conducted by IIEP in 1997 in Eritrea showed that although the employment rate of technical school graduates reached 90 per cent, most of them (72 per cent) were working in the public sector (Atchoarena and Tekie, 1997).

Most of the countries in sub-Saharan Africa regard technical and vocational education as vital to their economic development, as this sector is associated with acquisition of the qualifications needed to be competitive in the international arena. TVET is going through a stage of transition and reorientation in the region, as efforts are being made to give students some basic skills and knowledge, as well as the tools they need to play an active role in the production system (Atchoarena and Delluc, 2002, p. 57).

The development of partnerships should help technical and vocational education to adjust to the requirements of the labour market in both the formal and informal sectors. The state can play an important role here by introducing incentive measures and mechanisms enabling training to adjust to demand and by developing an appropriate legal framework (Fluitman, 1999; Rena, 2002<sup>b</sup>).

Many African countries consider today that the infrastructure and equipment of TVET institutions are for the most part obsolete, inadequate and unable to adapt to private-sector expectations and technological change. No country, however, can forego the effort to train young people in the technical skills needed to master the occupations of modern use and maintain, necessitate an effort to save this training system (Rena, 2005<sup>a</sup>). It is for this reason that both the international community and African governments have focused their attention on the question of how to reform technical and vocational education.

### **III] BACKGROUND OF TVET:**

It is observed that after Eritrea's independence there were only two technical schools: Asmara Technical School (established in 1954) and Winna Technical School (established in 1985 by the EPLF during the struggle for liberation). The curriculum for Asmara Technical School was developed to serve the interest of the *Dergue* regime. Whereas the Winna Technical School was developed to supply trained manpower mainly for the economic activities of the organization and then

expanding small cottage industries in the liberated areas (Rena, 2005<sup>a</sup>). The expansion of TVET provision after independence was to revitalize the devastated economy by supplying semi-skilled and skilled manpower on one hand and create employment opportunities to the output of the educational system on the other hand.

The government of Eritrea has realized the shortcomings of education and decided to make Rapid Transformation of the Eritrean Education System and thus issued a concept paper in 2002 as part of its educational reforms in the country (Rena, 2005b). Although, concept paper that focuses in bringing about a hastened change in the education sector of the country, it is to be noted that the main targets are: making use of the entire human resource of the country, provide quality education on equitable basis to all citizens, emphasize more on job-oriented vocational and technical education that enable students acquire basic skills marketable in the labour market, and improve the quality of education and make it worth and internationally competitive. In line with this, the concept paper proposes that the present narrow content of the high school education to be reformed into integrated high school education. In addition to the three stages in the educational stream: 'post-elementary; post-middle; post-secondary', to have branches of education and training system, which allow for early entry to the job market for those who need or choose early employment. These are primary vocational training programs after completion of elementary school, post middle school vocational training programs after completion of middle school, and post high school vocational training program. Thus to accommodate the required changes a comprehensive curriculum document, which provides an overall frame of reference for curriculum substance and structure, is indispensable.

#### **IV] DEVELOPMENT OF TVET IN ERITREA**

##### ***Eritrean Educational Policy***

Indeed, Eritrea's main asset is its people; therefore, revitalizing citizens with relevant education and training is the only means by which the overall socio-economic development of the country can be achieved (Rena, 2004). Thus one of the objectives of education is to accommodate the skilled man power requirements of both the public and private sector by the provision of an integrated knowledge and skill-based education at the middle and secondary levels, and through the expansion of various Technical and vocational education and training institutions. Keeping the human resource development in view, the new curriculum was introduced. This new curriculum integrates knowledge and skill-based education that would facilitate the learner's transition from school to further education and training as well as to the world of work. It is observed that Science and Technology and Information Communication Technology (ICT) are at the heart of the new curriculum at all levels in order to cope with the rapidly developing technology and swiftly changing society.

Further, the Government of Eritrea considers education as a fundamental human right and a life long process by which all individuals are given opportunities to attain their potential as all rounded citizens (Rena, 2002<sup>b</sup>). Parallel to this, the development of a competent and skilled public as well as private sector service is a pre-requisite for the attainment of the government's national development

objectives. Consequently, the provision of Education in Eritrea envisages towards:1] The creation of a modern, technologically advanced and internationally competitive economy; 2] The establishment of broad based education incorporating widespread dissemination of skills and languages and extensive human capital formation(MoE, 2003, pp. 6-9).

### ***Policy Statement***

The Government of Eritrea has been showing its commitment to establish an integrated, demand-driven, sustainable and autonomous TEVT system, which responds flexibly to the personnel and labour market demands of the nation. In realising this policy, National Training Authority (NTA), using the Macro-Policy as a guide in shaping its training policies and strategies with the following objectives and policies applicable to Eritrea's TEVT system:

- 1] Skilled manpower requirements of both the public and private sectors will be met by steadily increasing enrolments at the secondary, technical and vocational schools.
- 2] Continuing education through formal and informal channels will be promoted to achieve higher literacy rates and technical competence.
- 3] Tertiary education will be expanded selectively to meet the envisaged manpower requirements of the country. For diversified skill acquisition, this will be supplemented by utilising training opportunities available by the international community.
- 4] The emphasis of technical/vocational training will be the imparting of multi-craft dexterity and skills that enhance the job adaptability and retraining potential of the student.
- 5] Official recognition and/or professional accreditation of skills and academic attainment will be awarded only after undergoing government established certification procedures.

### ***Levels of TVET in the Eritrean education system:***

As stated in the Concept Paper for a Rapid Transformation of the Eritrean Educational system proposes at three points in the educational stream to be branches of the educational and training system, which allows for early entry to the job market for those who need or choose early employment. These are: Primary vocational training programs after completion of elementary school, post middle school vocational training programs after the completion of the middle school, and post High School vocational training programs. But the system is such that the people who follow these branches can get back to the main educational stream altogether, or continue with their education while still under employment as far as they wish to pursue it. The door for continuing to further education will always be open for those who wanted to and maintain appropriate levels of standard.

### ***Apprenticeships and Post Primary Vocational Education and Training Programs***

In Eritrea, this line of development is intended for: 1] Children who for one reason or another lag far behind in schoolwork and for children who start school very late to enable them to acquire some skill so that they will get some gainful employment. Those who follow this path must reach the age at which they can be employed in accordance with international standards for the right of the child; and 2] Adults are

given further training to enhance their capabilities in their occupations or acquire new skills so that they can either enter into business or job market more gainfully.

Entry requirement is the completion of elementary school and the type of training that is going to be provided for apprenticeships and primary vocational training can vary from craft work, to agriculture, small business, tasks in production lines of factories, to tasks in service industries and so on.

The type of training that is going to be provided for adults craft training and primary vocational training can vary from training in crafts, to agricultural work, training in law, training in public administration, training in health care, to training in various small business enterprises and cottage industries.

In the past, is observed that such training has been given in various fields of endeavor by various organizations in different circumstances. In the present educational system, it needs to be continued in a wider more organized and improved manner.

***Post -Middle School Vocational Training:***

The post middle school vocational training, to a large extent would be geared towards adults and students who for one reason or another have lagged behind in their progress in school or need to get to the job market early (Rena, 2002<sup>b</sup>). The entry requirement would be completion of middle school. The training may last from a few months to a couple of years or more. The proposed training has to be given by the employing organization. Various organizations in the construction industry, service industry, agriculture, business and so on would be the ones who would be expected to play the major role. Post middle school vocational training can also be important alternatives to general senior secondary education. Vocational schools will offer a broad curriculum including key skills like numeric and literacy, but will have strong 'career orientation', often maintained through close links with industry and commerce in the country.

***Post high school vocational training:***

The training that is proposed to be given at this level is specialized training and is usually given by the organization that hires the trainees. Example of such training are pilot training, sailors training, training given for special services like police force and security forces, flight attendants training, training of hotels and restaurants caterers, operators of special machinery or equipment, teaching and nursing. Such specialized colleges might also be established to serve industry and commerce.

Table –1 provides the graduates from all technical and vocational schools in the country during the year 1991-92 to 2004 –2005. It can be viewed that there are 4,347 graduates were produced in all eight TVET institutions in the country (*see appendix table-1*). Most of these graduates are serving different government and private institutions and thus catering the labour market needs of the country in a larger extent.

**Rena, Ravinder** and Biniam Kahsu (2006) "Labour Market Needs and Development of Technical and Vocational Education in Eritrea," New Delhi (India): *Manpower Journal*, Vol. 41, No. 4, October-December, 2006 Special Issue on Vocational and Professional Education ( A Quarterly Journal of the Institute of Applied Manpower Research – IAMR).

**Table-1: 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.

In Table-2 we presented the data of advanced diploma graduates during the period 1996-97 to 2003-2004. It is to be noted that there are two colleges at advanced level- Asmara Technical Institute and Asmara Commercial College produced 1,002 graduates during the eight-year period. It is observed that more than 90 per cent of the graduates working in different public and private sector organizations and fulfilling the labour market needs in the country (Rena, 2004).

**Table- 2: 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.

## **Results and Discussion**

The primary objective of technical and vocational education is to train a skilled labour force that can adapt to the requirements of the labour market. The TVET policies followed by the independent Eritrea are aimed at providing the managers and skilled labour, which Eritrea need to support the growth of the modern economy.

In the late 1990s, however, Eritrean economy entered a period of recession and economic crisis due to the border conflict. The growth of the modern-sector employment slowed sharply as a result of spending cuts in the public sector and massive lay-offs to maintain productivity in the private sector. The consequence was a rapid rise in unemployment among young people, particularly those who had completed their secondary schooling.<sup>2</sup>

Various providers such as line ministries, the private sector, employers, etc have modestly delivered the TVET in Eritrea. However, this has been delivered in an uncoordinated manner and consequently some of them have been duplicating the efforts of others by providing similar types of skills training. The current system is characterized by a supply-driven that has not considered the labour market needs in the country. Hence, to optimally utilize the limited resources that the country is endowed with, this trend has to be improved.

Imported models of technical and vocational education, which were developed in a context of economic growth, proved incapable of supplying skilled labour that met the highly varied requirements of Eritrean production systems (Rena, 2002a). A wave of criticism concerning the ineffectiveness and high cost of TVET began to be heard, and this form of education has been called into sharp question on the grounds that it is poorly suited to labour markets dominated by informal-sector employment.

It is observed that in earlier days of state planning, government used to allocate resources to vocational education and training according to public-sector objectives and priorities, with no or little involvement of the other partners. The failure of this old style of planning has led the government to seek partnership with labour market stakeholders with a view to bringing the supply of training closer to enterprise and labour market needs.

As stated earlier, the economic and financial crisis that has stuck Eritrea since 1998 that has brought numerous changes in the economy (especially the structure of production system and on the labour market). The end of guaranteed access to public sector employment has contributed to increase graduates' unemployment and/or underemployment and deteriorating the rate of return of investments in post-basic education.

It is to be noted that two colleges at advanced level- Asmara Technical Institute and Asmara Commercial College produced 1,002 graduates and eight TVET institutions produced 4,347 graduates in the country. Although most of them employed in different public and private institutions, but in the recent times, the job opportunities for TVET graduates have changed and become more uncertain as the focus has

shifted to the formal and informal private-sector (Rena, 2005b). Enterprises have more specialized requirements concerning the qualifications of the workforce, and this entails a redefinition of technical and vocational education.

In this context, TVET system in Eritrea, originally shaped on the model of the former colonial powers, gradually became unable to train young (people with the qualifications demanded by businesses). Besides, TVET became too expensive in a context of structural adjustment programmes and related public spending cuts. In turn, inadequate investment in TVET contributed to its deterioration and further aggravated issues of effectiveness and efficiency.

The full exploitation of the potential benefits that public TVET institutions in Eritrea could derive from dual training schemes is jeopardized by obsolete training facilities and poorly qualified and/or inexperienced teachers resulting from a long-term deterioration in the level of financial support received from the government and donors.

### **Policy Implications:**

Today, shifting the policy focus from inputs to outputs, through new financing and certification mechanisms, involving social partners in governance, granting more autonomy to institutions, promoting private providers and company-based training must be part of the new approach.

Education, mainly designed to introduce participants to the working world and to prepare them for entry into technical or vocational education programmes. Successful completion of such programmes does not confer a labour market relevant vocational or technical qualification. For a programme to be considered as pre-vocational or pre-technical education, at least 25 per cent of its content must be vocational or technical. This minimum is needed to ensure that the vocational or technical subject is not simply one among many others.

TVET education policy should also be designed to lead participants to a better understanding of a subject or group of subjects, especially, but not necessarily, with a view to preparing them for other (additional) education at the same or a higher level. Successful completion of these programmes may or may not provide participants with a labour market relevant qualification at this level. Such programmes are typically school based. Programmes with a general orientation and not focused on a particular specialization should be classed in this category.

Additionally, it must be designed to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation, trade or group of occupations or trades. Successful completion of such programmes leads to a labour market relevant vocational qualification recognized by the competent authorities of the country in which it is obtained.

## **V] CONCLUSION:**

The Government of Eritrea considers education as a fundamental human right and a life long process by which all individuals are given opportunities to attain their potential as all rounded citizens. Parallel to this, the development of a competent and skilled public as well as private sector service is a pre-requisite for the attainment of the government's national development objectives. It is to be noted that two colleges at advanced level produced 1,002 graduates and eight TVET institutions produced 4,347 graduates in the country.

It seems clear that, transforming the institutional, legal, financial framework in which TVET institutions in Eritrea operate is not sufficient to produce significant results to meet the growing needs of labour market. Thus new institutions have to be established and new scenarios have to be developed to correct this situation. It is also however clear that some impoverished and weakened institutions in the country can not undertake the required evolution unless they receive sufficient support from the government. Since Eritrea, a developing country, it cannot afford to provide well-developed TVET education to meet the labour market needs; hence it would be effective to establish the meaningful linkages with the environment that could probably become a strategic line for international donor support. In addition to this technical dimension, partnership also involves a political vision. The mobilization of key players, concerted effort, and dialogue are also considered as ways of regulating training resources. Partnership is not just concerned with initiative-taking and management; it is also a value system and a goal.

It is observed that due to its sensitivity to emerging and declining economy and technological change, the Government is required to make policy amendment and adjustment on a regular and continuous basis for the realization of its cost-effectiveness. It must also contribute to mobilizing outside resources in the form of expertise and private investment in developing the TVET sector in the country.

The Government of Eritrea is exerting its efforts to establish an integrated, demand-driven, sustainable and autonomous TEVT system, which responds flexibly to the personnel and labour market demands of the nation. Although the Government had undertaken many programmes such as: skill development, self-employment training and opting for new outcome-based system on the establishment of national qualification framework etc., but still the labour market needs are not proportionately catered.

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## Notes:

<sup>1</sup> The Nine Ethnic groups of Eritrea are: Tigirgna, Tigre, Sahoo, Afar, Bilen, Hidareb, Kunama, Nara, and Rashaida. Where as the six Administrative zobas or provinces are: Maakel, Anseba, Debub, Gash Barka, Northern Red Sea, and Southern Red Sea.

<sup>2</sup> Most of the young employees in Eritrea below the age of 45 are put under National Service for a minimum of one and half years (rather more) who get Nfa 145 per month irrespective of their position and/or profession. It is to be noted that almost half of the total employees in the country get their monthly salary ranging between Nfa 145-450.

## REFERENCES

Atchoarena, David and Andre Delluc (2002) Revisiting Technical and Vocational Education in Sub-Saharan Africa: An updates, Innovations and Challenges. Paris: UNESCO-IIEP.

Atchoarena, David and Tesfamariam Tekie (1997) Skill Development and Labour Market Study in Eritrea. Report of the Tracer and Enterprise Surveys. Ministry of Education in collaboration with International Institute of Educational Planning, UNESCO.

Fluitman, F. (1999) "The Roots and Nature of Reforms in Vocational Education and Training: An Analytical Framework and Some Examples", In: Prospects, Vol. XXIX, No.1.

Government of Eritrea (February 5, 2001) National Commission for the Demobilization and Reintegration Program (ER-DRP) (first draft ).

König, Andres and Dieter Moll (1997) Technical and Vocational Education and Training in the State of Eritrea

Lannert, J.; Munbodh, S.; Verma, M.C.;Atchoarena, D. (ed.) (1999) Getting the Stakeholders Involved: Partnership at Work in Three Countries from Africa, Asia and Eastern Europe. Paris: UNESCO-IIEP.

Middleton, J., Demsky, T. (1988) World Bank Investment in Vocational Education and Training, A Review of World Bank Investment. Washington, D.C.: World Bank.

Ministry of Education (1999) Education Brief 1999.

Ministry of Education (1999) Eritrea: Basic Education Statistics from 1995-2002.

Ministry of Education (2001) Action Plan for the Development of National Framework.

Ministry of Education (2003) Technical Education and Vocational Training Sub-Sector. Achievements, Policies, Projections, Forecasts and Scenario Building(un published).

Ministry of Education (April 2000) "Integration of Eritrea's Educational Strategy with other Social Sector Strategies", Paper presented to the Seminar on the Integration of Social Sector Strategy in Eritrea. Massawa. May11-13, 2000.

**Rena, Ravinder** and Biniam Kahsu (2006) "Labour Market Needs and Development of Technical and Vocational Education in Eritrea," New Delhi (India): *Manpower Journal*, Vol. 41, No. 4, October-December, 2006 Special Issue on Vocational and Professional Education (A Quarterly Journal of the Institute of Applied Manpower Research – IAMR).

Ministry of Education (Draft 1996) National Framework for Technical and Vocational Education and Training.

Ministry of Education (January 2001) Framework For Standardization and Accreditation of TVET.

Ministry of Education (June 1999) Our People, Our Future. A Framework for the Development of Human Resources in the Education Sector.

Ministry of Education (October, 2000) A Workshop on Technical Education and Vocational Training. Policy Framework. Workshop Report. Department of Technical and Adult Education.

Ministry of Education (undated) Skills Training Provision in Eritrea 1993-1999.

Ministry of Education, Department of Technical and Adult Education (February 2001) Workshop Paper. For the Standardization and Accreditation of Training Programs in Computer Applications.

Moura Castro, C. (1999) "Vocational and Technical Training: Setting the Record Straight", In *Prospects*, Vol. XXIX, No.1.

Rena, Ravinder (2002<sup>a</sup>) "Financing and Cost Recovery in Higher Education: A Study with Special Reference to Private Colleges in Andhra Pradesh" (*Ph.D. Abstract*), *Finance India Journal*, Vol. XVI, No. 2 (June 2002), pp. 662-666.

Rena, Ravinder (2002<sup>b</sup>) 'Education: Basis for Development in Eritrea', Asmara: Eritrea Profile (A Weekly Bulletin of News and Views) Ministry of Information and Culture, Vol. 9, No. 40, (7<sup>th</sup> December).

Rena, Ravinder (2004) "Educational Development in Eritrea", Asmara: Eritrea Profile (A Weekly Bulletin of News and Views) Ministry of Information and Culture, Vol. 11, No. 12, (1<sup>st</sup> May,) p.6.

Rena, Ravinder (2005a) "Eritrean Education – Retrospect and Prospect", Nairobi (Kenya ): *Eastern Africa Journal of Humanities and Sciences*, Vol.5, No.2. ((A Biannual Journal Published by the Faculty of Humanities and Sciences, The Catholic University of Eastern Africa) pp.1-10.

Rena, Ravinder (2005b) "Financing of Education in Eritrea – A Case Study on Zoba Maakel", Albany (USA): *The African Symposium, A Publication of the African Educational Research Network* Vol. 5 No. 3 (September) pp.113-128.

Tesfamariam Tekie (April 2000) *Technical and Vocational Education and Training for Employment Creation.* Report prepared for Ministry of Labour and Human Welfare and ILO.

World Bank (1991) *Vocational and Technical Education and Training.* A World Bank Policy Paper, Washington, D.C.: World Bank.

**Rena, Ravinder** and Biniam Kahsu (2006) "Labour Market Needs and Development of Technical and Vocational Education in Eritrea," New Delhi (India): *Manpower Journal*, Vol. 41, No. 4, October-December, 2006 Special Issue on Vocational and Professional Education ( A Quarterly Journal of the Institute of Applied Manpower Research – IAMR).

**Appendix Table – 1: TEVT Intermediate and Advanced Schools in Eritrea, Management and Field wise classification.**

Name of School	Management	Year Est.	Field(s) of Instruction	Level(s) of Instruction	Est. by	Location
Asmara Commercial College (ACC)	Public	1996	Accounting Management Secretarial science Banking & Finance	Advanced	MOE	Asmara
Asmara School of Fine Arts(ASFA)	Public	1987	Arts	Intermediate	EPLF/MOE	Asmara
Asmara Music School (AMS)	Public	1987	Music	Intermediate	EPLF/MOE	Asmara
Asmara Technical School (ATS)	Public	1954	General metal Machine shop Auto-mechanics Woodwork Electricity Electronics Surveying Drafting Building construction	Intermediate	Ethiopian MOE/US	Asmara
Don Bosco Technical School (DTS)	Private	1998	General mechanics General building	Intermediate	Missionaries	Dekemhare
Hagaz Agricultural School (HGAS)	Private	1999	Plant science Animal science Agro mechanics	Basic & Intermediate	La Salle	Hagaz
Hamelmallo Agricultural School (HMAS)	Public	1999	Plant science Animal science Agro mechanics	Intermediate	MOE	Hamelmallo
Mai-Habar Technical School (MTS)	Public	1993	General metal Automotive mechanics Woodworking Electrical technology Electronics Building construction	Intermediate	MOE	Maihabar
Pavoni Technical Institute (PTI)*	Private	1996	Machine Shop	Advanced	Pavoni-Missionary	Asmara
Winna Technical School (WTS)	Public	1985	General metal Machining technology Automotive mechanics Woodworking Electrical technology	Intermediate	EPLF	Nacfa

**Source: TVET/MoE Various Reports.**

*Note: \* Pavoni Technical Institute was taken over by the government since 2003 and renamed it as Asmara Technical Institute.*

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