The State of Human Resource Development in the Ethiopian Leather and Leather Products Technology Institute

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Abstract: Human resource development is one of the policy tools to enhance national development of a country. Ethiopia being first in Africa in livestock population, the presence of a higher institute in leather and leather products technology enables the country to get maximum benefit from skin and hides (Ethiopia's second highest export commodity next to coffee). The Ethiopian Leather and Leather Products Technology Institute (LLPTI) was established in 1998, and has been producing skilled manpower at the certificate and advanced certificate level. Recently, the institute commenced higher level technical and vocational training with the objective of preparing middle level technicians and managers in the areas of leather processing technology, leather goods technology, leather garments technology and footwear technology. Accordingly, this study aimed as examining the development trends, problems and prospects in the LLPTI. A descriptive survey method was employed to carry out this study. The data was gathered through questionnaires, interviews and documentary survey. After analyzing the data in qualitative and quantitative terms, the problems and prospects of the institute were reviewed in light of qualification of trainers, quality of training equipment and raw materials, availability of funds and demand for the graduates. Finally, conclusion and recommendations were drawn so as to improve the existing situation of the institute.

Introduction

Background to the Problem

Human development is viewed in a wide perspective incorporating the political, social and economic dimensions, which are closely linked together. Man is not only the agent of development but also the object of the development process. Development is aimed to enable man to lead a better life and it is man who makes development

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possible. To this effect, it is through continuous learning that man can adjust himself to the environment and sustain available resources (United Nations, 1979).

The capacity of mankind to manage resources, according to the United Nations (1979), depends primarily on technology, value orientation, economic, and social structures (education, health, and etc). Human development and social conditions are interwoven. For instance, there is evidence that improvement in education contributes to declines in death rates and birth rates, and to increase in productivity.

It may be difficult to increase the wealth of a nation without improving the quality of human resources. This can be possible through education. However, academic education is not enough for social and economic changes. Vocational training is therefore introduced in the education system with the purpose of preparing individuals for paid jobs and self-employment.

Technical and vocational training encompasses technical, business, home care, agriculture, leather technology, and etc. It is offered in short-term or long-term basis at secondary and college levels.

Research findings on TVET in Ethiopia, (Wanna, 1996) revealed the factors that hinder the development and successful implementation of vocational training programs some of these are.

- a small modern and near stagnating employment market;
- training programs based on anticipated employment demand rather than on planned labor need;
- training institutions with little or no linkage with enterprises or employers;
- Little or no success in developing alternative financing sources;

- rigid curriculum in the face of changing economic circumstances;
- lack of follow-up studies of graduates (tracer studies).

Ethiopia has been implementing technical and vocational training as one of the strategies for human resource development. Skin and hides are the second largest export items for the Ethiopian economy next to coffee. To this end, it is worthwhile to study the development trends and problems of the LLPTI, which produces skilled manpower for the leather sector.

Statement of the Problem

Ethiopia is a country located in the horn of Africa, covering a landmass of 1 million square kilometers. Administratively, the country is divided into nine Federal States and two City Administrations following the decentralized system of governance established since 1992. Although the country is endowed with favorable climate, fertile land, and large number of livestock (first in Africa), 45.5% of the total population is living in poverty. Per capita income is around USD 100, which is one of the lowest in the world. Similarly, the human development index is low, which is about 0.359 in 2001 (UNDP, 2003 and The World Bank Group, 2003).

According to the Ministry of Trade and Industry (1997), Ethiopia has the largest livestock population in Africa, ranking among the top ten nations of the world and having one of the highest per capita livestock in the world. As a result of these high potential resources, semi-processed hides/skins and leather products are the leading export items next to coffee. However, the return from the export of semi-processed hides/skins is very low compared to what can be gained from processed leather and leather products with a higher value added.

Ethiopia's hides and skins are very much in demand both locally and abroad for their natural substance of fine grain and compact texture which makes them ideally suitable for the production of high quality leather. One of the major constraints that contribute for the low income has been the non-availability of trained personnel who can determine the pace and direction of the sub-sector's growth. The ever-increasing cost of specialized training in the developed as well as developing countries is another factor that contributes to the deficiency.

Although the country has adequate resources of hides and skin, which is a sound base for the development of the leather and leather goods industrial sub-sector, the average capacity utilization of the leather and leather products industry including tanneries, footwear and other leather goods is low.

There are a number of hurdles such as shortage of skilled manpower, lack of marketing know-how, insufficient training in the basics, limited supply of finished leather, poor quality of hides and skins, inadequate tanning materials, backward processing technology and production methods, lack of quality control, standardization and lack of adequate research and development facility (Ministry of Trade and Industry, 1997).

Hides and skins, leather and leather products rank highest in value of the world traded agricultural commodities amounting to about 41 billion USD annually. In spite of having the largest livestock population in Africa, Ethiopia is not benefiting from the strong raw material base and the market opportunities left to the developing countries (Ministry of Trade and Industry 1997).

Technical and vocational training is considered as one of the policy options to enhance human resource development in Ethiopia. To this effect, training institutions expanded from 17 in 1992/93 to 133 in 2003/4. Most of these institutes operate at secondary level (10 + 1

and 10 + 2). The LLPTI is one of the few institutes that operate at college level (10 + 3).

Despite the expansion effort, there exists inadequacy of skilled manpower in some sectors such as the leather industry. There is also scarcity of well-trained trainers in the specialized institutes like the LLPTI. In this study, therefore, it is hypothesized that investment in human resource development of the Ethiopian Leather and Leather Products Technology Institute contributes to the improvement of the leather sector in the country.

Purpose of the Study

The main purpose of this study is to investigate the development trends, problems and prospects in the leather and leather products technology institute and to draw out recommendations to improve the state of human resource development in the Institute.

Objectives of the Study

- To identify the major problems that affect trainees to pursue their study;
- To identify the major problems that trainers of the institute face in implementing the program;
- To examine the existing situation in the Institute which could facilitate further development of the human resource;
- To shade light on policy suggestions to be forwarded in order to alleviate the problems of human resource development in the Institute.

Significance of the Study

Ethiopia is not utilizing the high potential of its livestock. Optimum utilization of the country's leather potential lies not in the production of semi-processed leather or even finished leather. It is rather in the production of leather products (footwear, leather goods and leather

clothing). To be in line with the latest technology the training given at all levels needs to be supported with well-qualified teaching staff and personnel so as to provide skilled manpower who can produce an internationally competitive product in the leather sector. With respect to this, the study would come up with some alternatives that could help policy makers to develop strategies so as to address the problem. Besides, the findings and recommendations will help the institute, governing bodies and assisting organizations to plan further to utilize the institute to its full capacity enabling it to deliver quality training by upgrading the human resource of the Institute. On top of this, the study will add some knowledge and enrich the existing literature on the area.

Scope of the Study

Middle level technical and vocational education and training is offered at 10+1, 10+2 and 10+3 levels in different government, private and non-governmental institutions. In order to make the study manageable, it is delimited to four 10+3 programs given in LLPTI. The study focuses on the LLPTI, which is located in Kaliti, Addis Ababa City Administration as it is an emerging regional institute in Africa in the leather sector.

Review of related literature

Vocational Training and Economic Development

Historically there are two opposing conceptions of education. Those who consider education as input into economic growth (the investment or economic efficiency approach) require improving the quality of education by decreasing educational expansion. On the other hand, those who view the role of education in equalizing opportunity and providing for social mobility (equity or participatory approach) assume that by gearing the educational system to full participation, society can mobilize social resources that will reduce the costs of schooling and increase school yields. Besides, they argue

that access to education, particularly for the minorities or marginalized, should increase rather than focusing on economic efficiency (Carnoy as cited in Hallak and Caillods, 1995).

There is no simple approach suitable for all countries. Each society has to design its own proper mix to make things work. The challenge for policy makers is to strive to a practical method of establishing a proper mix between quantitative and qualitative expansion of educational services in order to fit the economic situation of the country.

One important difference between developed and developing countries is related to job creation. Developed countries create jobs for their citizens but developing countries cannot compete with developed nations without improving working conditions and productivity of the workers that will merit higher wages. Such strategy requires a need for greater technological investment, streamlined organizational structure, and a focus on highly trained workforce (Levin and Rumberger as cited in Hallak and Caillods, 1995).

One of the strategies for the development of human resources is training. Vocational training promotes education for work. However, this assumption is not without challenge. Vocational training by itself does not create job. Strengthening the training alone will not close the gap between the demands for training and supply of employment opportunities. Hence, attention should be given for economic development and creation of entrepreneurial culture.

The Practice of Vocational Training in Some Selected Countries

Human Resource Development through Vocational Education in the United Arab Emirates (UAE): the Case of Dubai polytechnic

Dubai polytechnic is considered as an example of a private sector provider of vocational higher education. With regard to higher education, objectives were to include improving the quality and

suitability of higher education, strengthening the links between higher education and the labor market, and developing training and research activities. By the mid-1980s the UAE's institutions of higher education were not producing graduates with the types of skills and knowledge demanded by industry. Thus, in an effort to increase the provision of post-secondary vocational and technical education, the federal government established the higher colleges of technology in 1988. The Minister for Higher Education established an Advisory Planning Committee (APC) to examine all aspects of higher education in the country, and assess its current status, identify problems, propose solutions, and recommend policies and actions, which would ensure that suitable and high quality post-secondary education would be available for UAE citizens well into the twenty-first century (Wilkins, 2001).

The Vocational Education System and Colleges of Technology in Saudi Arabia

Several government institutions have contributed to the development of the vocational education and training system in Saudi Arabia. While strategic planning and decision-making are carried out by the Council of Ministers, the Ministry of Planning and the Manpower Planning Board, the government technical vocational training (GOTEVT) and several specialized training institutions implement the strategy. The government assumes that, in addition to producing skills compatible with the needs of the economy, colleges of technology divert post-secondary students into vocational studies rather than university education or white-collar work in the public sector. It is expected that this will lesson the pressure for white-collar jobs in the public sector and reduce the tension that unmet demand for employment can bring.

Colleges of technology pay high salaries to Saudi and expatriate teachers and instructors. As a result, they are able to attract highly qualified teachers, instructors and consultants. As stated in the policy document of the colleges, the curriculum should enable students to be trained and improve their prospect for employment by placing greater

emphasis on equipping them with skills that are currently required by the labor market. The availability of financial, human and physical resources enables colleges of technology to develop curricula and review them continuously. Hence curricula at Saudi colleges of technology are flexible and updated yearly to meet labor market needs (Mellahi, 2000).

Vocational Training in a Fast Developing Economy of Mauritius

In the past, the development of the country was based on cheap and unlimited supply of labor. This situation did not bring a significant impact for its economic development. The unemployment rate was high. Gradually, this situation is changed and Mauritius has made a breakthrough from high unemployment rate of over 20% to less than 1-8 % within a decade. The dynamism of manufacturing industries, the tourist sector, and favorable export condition contributed to the economic success, which in turn accelerated the vocational training system (ILO, 1997).

The Practice of Vocational Training in the Ethiopian Leather and Leather Products Institute

Overview of the Institute

Leather and leather products industry is one of the sectors that the nation's industrial development strategy has given highest attention. The government of Ethiopia has established LLPTI in 1998 by proclamation No 41/1988 the institute is managed by a board, and has three major objectives to perform for the Ethiopian leather industry. These are training manpower, conducting research and rendering consultancy and technical services to the industry. One of the main goals of the institute is to play a vital role in improving the caliber of the workers of the leather industry sector.

To this effect, the institute has interacted with similar institutes in England, India and South Africa for the development of curriculum for

its regular training. It has also developed its own exclusive curriculum for 10 + 3 training programs to develop future human resources of the industry.

With regard to developing the institute's own trainers capacity, the institute has drawn out 11 instructors from different industries and has given them advanced training in England, India and Italy.

Currently, the following training programs are run by the Institute:

- 101 regular students assigned by the Ministry of Education for three years /10+3/ diploma programs in leather processing (26 trainees of which 10 are females), footwear (20 trainees of which 7 are females), leather garments (27 trainees of which 5 are females) and leather goods technologies (28 trainees of which 7 are females).
- 60 trainees for higher certificate in leather, footwear and leather garment technologies.
- 14 trainees sponsored by Goal Ethiopia in support of the needy, and
- 62 trainees in leather technology, footwear, leather garment and leather goods as support to tailor–made courses for the industry are in progress."[1] [1]

The institute is well equipped with advanced machinery in both quantity and variety, and can be comparable to the best in the world. But it is to be borne in mind that this alone cannot bring a radical change in the leather sector of the country. As in the computer industry without the software, no hardware can work successfully, no matter how good they are. Similarly, the final desired achievement of the institute in terms of success very much depends upon the availability of quality trained instructors and technicians who can

[1] LLPTI, 2004

determine the pace of the sector in the fast track of growth and prosperity.

Presently, the institute comprises 96 staff members, out of which 20 (18 male and 2 female) are instructors on permanent bases and 2 expatriate staff from India on contractual bases. In addition to this, there are 59 (40 male and 19 female) administrative staff on permanent basis and 15 (10 male and 5 female) workers on contractual basis.

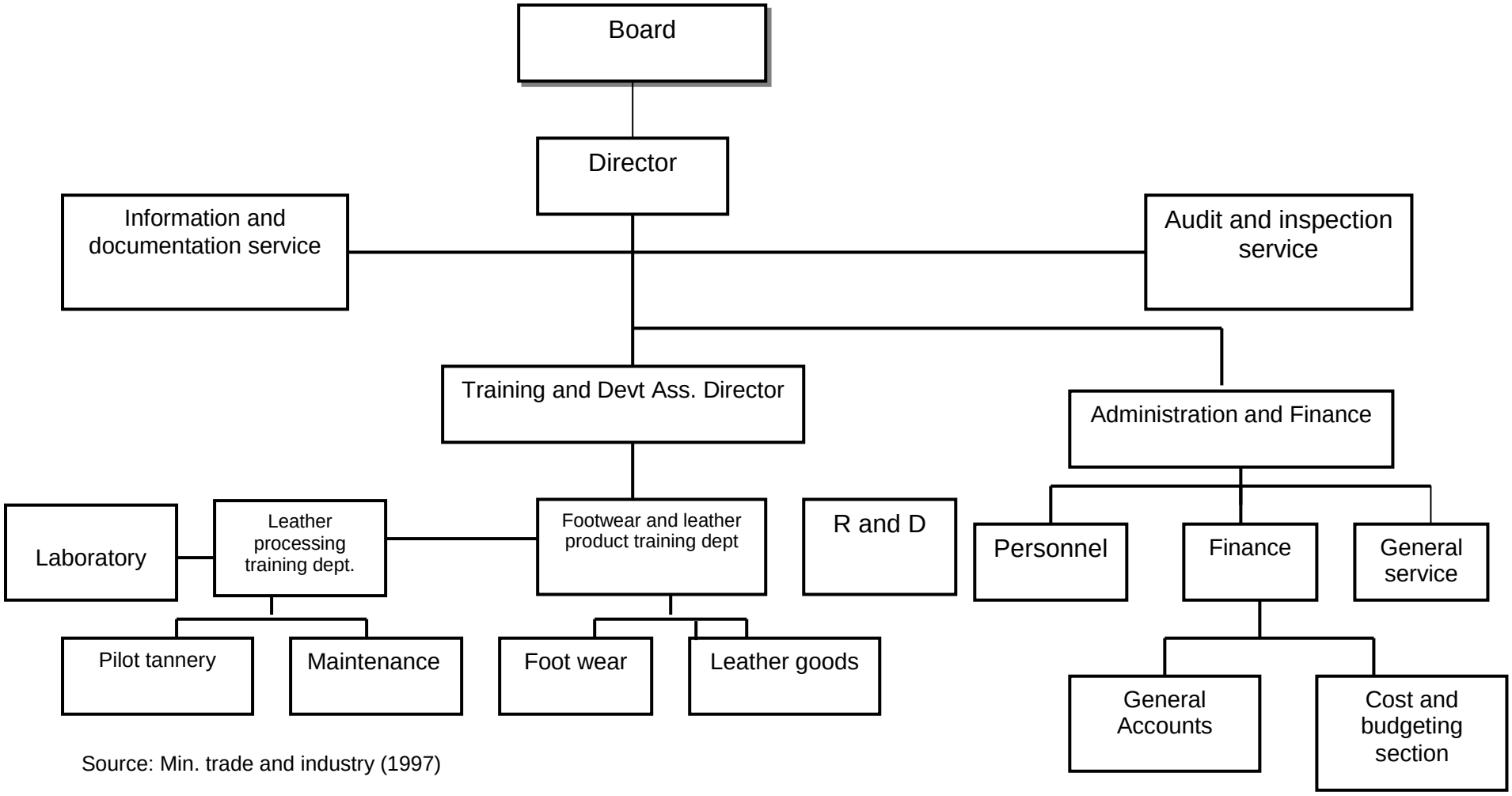
Objectives of the leather institute

The main objective of the institute is to enhance the development of leather industry through provision of training on various aspects of leather production to alleviate the problem of shortage of skilled and trained manpower in the leather sub – sector. It will include theoretical and practical training in all aspects of leather manufacture, raw materials, chemical processes, mechanical operations, and quality control methods. According to the Ministry of Trade and Industry (1997), in order to fulfill the overall objective, the institute will perform the following activities:

- Provision of training at various levels in leather technology to augment the supply of leather technologists;
- Undertaking applied research and development activities on the leather sub-sector in order to improve the quantity and quality of leather products;
- Provision of physical testing services to tanneries and shoe factories to strengthen the development of such enterprises; and
- Provision of information services to facilitate the development of the sector[2].

[2] Ministry of Trade and Industry (1997).

2.3.3 LLPTI Organizational Structure



Source: Min. trade and industry (1997)

Major activities

The Leather and Leather Products Technology Institute is financed by the Ministry of Trade and Industry. The major activities of the institute are described as follows:

I. **Training:** There are four types of training programs.
   - Regular diploma program at 10+3 level for 3 years in four departments namely leather processing technology, leather goods technology, leather garment technology and footwear technology, with a capacity of 30 students/department.
   - Higher certificate program for 12^{th} grade complete with average C in at least 3 subjects (science) for a duration of 1 year in the four departments with a class size of 15-20 student/department.
   - Basic technology courses for grade 8 completes for one semester in four departments. This training is mostly suitable for workers from factories. It is a sort of on the job-training. After completing the training, the trainees will be operators or will open shoe shops by themselves.
   - Tailor made courses-such training mostly helps to enhance the capability of employees. The training is designed on customer choice in all four departments. The training ranges from 15 days to 3 months according to the need.

II. **Research:** The second major activity is research and development program to solve the problem of the leather sector and to improve its functionality.

III. **Consultancy and Teaching Services:** The third major activity is consultancy and technical services which include laboratory test, consultancy services and technical services using machines.

Future plan:

- To open B.Sc. programs in the four departments within the coming 2-3 years;
- To upgrade the institute so as to maintain its international standard;
- To upgrade the laboratory center of the institute to obtain international accreditation and avail laboratory test services for the sector; and
- Expanding further the training areas in the institute to provide training facilities for other African countries and investors as well.

COMESA- LLPI contribution to human resource development of LLPTI

The Preferential Trade Area for Eastern and Southern African States (PTA) has been established by a charter in 1982 as a first step towards the establishment of a common market and eventually an economic community of member states. The PTA was transformed into a Common Market for Eastern and Southern Africa (COMESA) in 1994 and a free trade area (FTA) launched on 31st October, 2000 (COMESA, 2003).[3]

The COMESA member states with a total area of 12.8 million sq. km and a population size of 118,950,321[4], covers a sub-region of 25 countries and 20 of the members have signed the charter for the establishment of COMESA[5]. Four countries i.e. Ethiopia, Kenya, Sudan and Zimbabwe were selected to be the sites for the implementation of the program.

[3] COMESA LLPI brochure (2000)
[4] CIA World Factbook, 2005.
[5] COMESA member African states (2004): Angola, Burundi, Comoros, Congo DR., Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.

COMESA has several objectives out of which one is to co-operate in the creation of an enabling environment for foreign, cross border and domestic investment including the joint promotion of research and adaptation of science and technology for development.

In the industrial sector, COMESA, among other activities, promotes:

- the establishment of joint industrial supporting institutions and other infrastructure facilities ;
- the joint development of industrial research, skills and technology; and
- dissemination and exchange of relevant information .

In the fulfillment of the industrial objectives, the Leather and Leather Products Institute (LLPI) was established by the signing of the charter by COMESA as a sub-regional industrial supporting institution in the leather sub-sector.

The LLPI's mission is to contribute to the sustainable development, competitiveness and integration of the COMESA leather sector while operating as a technical institution and a center of excellence in leather and leather products processing and manufacturing technology.

The key services provided by LLPI are:

- Human resources development
- Investment and trade promotion
- Research and development
- Consultancy and extension
- Information collection and dissemination

The major activities of LLPI are:

- Development of the leather sector
- Capacity building or training of manpower involved in leather technology

- Research and development
- Consultancy

Considering the potential of the leather industry for growth that can be realized by mitigating the prevailing challenges facing the industry, the adding value to African leather through improvement of quality of leather and leather products (AVAL – project) of the COMESA / LLPI was designed to improve the capacity and quality of leather and leather products of few selected African countries, Ethiopia being one of the countries selected for the implementation of the project [6]

In order to achieve its objective of human resource development the AVAL – project in collaboration with LLPTI, has assessed the training program in five relevant areas and identified the gaps in the training of trainers needs and management staff of the institute.

- Training of trainers on skills and curriculum development, teaching methodology, evaluation and assessment – for 20 senior and junior instructors of LLPTI for 12 days
- Strategic planning and management for 10 senior management staff of LLPTI for 5 days
- Total quality management for 10 department heads, technologists, instructors of LLPTI for 6 days
- Government accounting course for 2 accountants of LLPTI for 12 days
- Office operations, level II for LLPTI top secretary functions and executive assistants-for 3 candidates for 12 days.

The above mentioned training programs designed for the institute are considered as basic instrument's to bring about considerable changes in the development of competencies and acquiring basic skills that contribute to the realization of objectives and mission of the institute.

[6] COMESA/LLPI (2004).

Methods of the Study

Design of the Study

In order to analyze the state of human resource development in the Ethiopian LLPTI, a descriptive survey method, which incorporates interview with the head of the institute and National coordinator for COMESA/LLPI was employed. Questionnaires were administered to 21 (20.8%) trainees out of 101 trainees of 10+3 programmes in four areas of specialization, that is, leather processing technology, footwear technology, leather garments technology and leather goods technology, and were selected using stratified random sampling. In addition to that, another set of questionnaire was distributed to 13 (59.1%) trainers. Particularly, secondary data were collected from COMESA and publications of LLPTI. Moreover, document analysis has been done to enrich the available information.

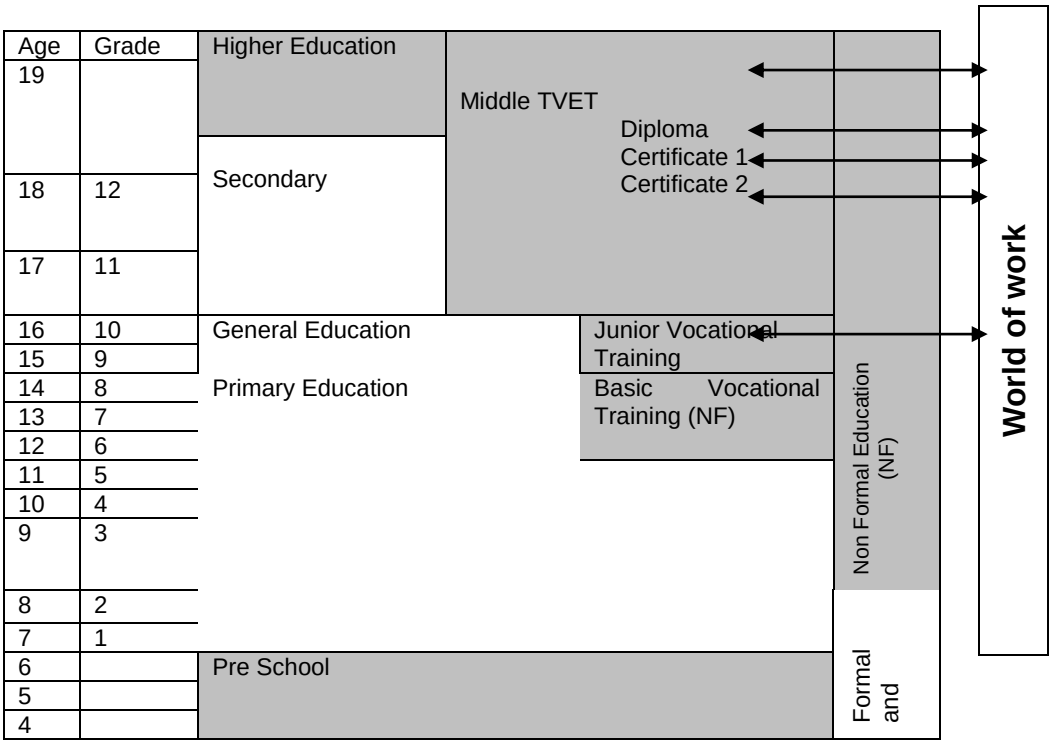
Data Gathering Procedure

Brief orientations were given to selected trainees about the questionnaire and were asked to fill the questionnaire under the supervision of the researcher. Therefore, it was possible to get filled all the intended number of questionnaires by trainees. On the other hand, out of 21 trainers some had taken leave and could not be found at all. The questionnaire was therefore given for 18 trainers through respective department heads and it was possible to recover 13 (72.2%) questionnaires.

Analysis of Finding and Discussion

The education and training policy of the TGE (1994:16-17) supports job oriented and more flexible vocational training system. As shown in Figure I the policy indicates different exit points at grades 4, 8, and 10.

Figure I: Organization of Technical and Vocational Education and Training



Source: MoE(2002)TVET-Strategy

Basic Vocational Training: At the lower level, there is a short-term non-formal training geared to agriculture, crafts, construction and basic bookkeeping in the form of apprenticeship for those students leaving primary school (discontinue primary school). The problem at this stage is whether or not the students are mature enough to be on their own after receiving the training.

Junior Vocational Training: It is designed for students leaving after 8 years of primary schooling and those who may not continue with general education in the areas of agriculture, industrial arts, construction, commerce and home science. Although the junior

vocational training is stipulated in the policy, it is not fully realized. The absence of such post-primary training adversely affects students for whom primary education is terminal. If the post-primary training had been functional it would have also decreased the pressure when placing students for middle level training after completing grade 10.

Middle Level Vocational Training: Vocational training was also organized for those who complete grade 10 in Business and Information Technology, Textile and Garment Technology, Construction Technology and Industrial Technology from 1-3 years of duration and Hotel Services and Beautification for 1-2 years duration. Accordingly, the training is patterned as 10+1, 10+2 and 10+3 in 24 occupations or training areas. At this stage, students lack proper guidance and orientation. Since there is no pre-vocational training at the upper primary, the personal and social development of the students was adversely affected. Moreover, the students lack adequate orientation to choose their future field of study after grade 10.

Table 1: Personal Information of Respondents

Respondents	Trainees										Trainers									
Category	Sex			Age (years)					Point of Grade 10		Sex			Qualification			Years of service			
	M	F	Total	16	17	18	19	20	2.1-2.19	2.2-2.3	M	F	Total	Dip.	B.Sc.	Dip+ PGD	1-5	6-10	11-15	16-20	>20
Leather processing technology	5	-	5	-	1	1	2	1	-	5	5	-	5	-	5	-	2	1	1	1	-
Leather goods technology	4	2	6	-	5	1	-	-	2	4	2	-	2	1	-	1	-	-	-	-	2
Leather garment technology	2	3	5	2	1	2	-	-	3	2	2	-	2	1	1	-	-	-	-	-	2
Footwear technology	3	2	5	1	2	2	-	-	2	3	4	-	4	2	1	1	1	-	-	-	3
Total	14	7	21	3	9	6	2	1	7	14	13	-	13	4	7	2	3	1	1	1	7

Table 1 depicts the personal information of respondents. Out of 101 trainees who are attending the 10+3 program in the institute, 21 trainees (20.79%) had participated in filling the questionnaire out of which 33.3% were female trainees. The age of trainees ranged from 16 to 20 years, majority of them being 17 years. As per the information obtained from the questionnaire and observation, age factor has to be given consideration for department like leather processing technology due to the difficulty of handling heavy-duty machines and heavy materials. All of the trainees have got above 2 point in grade 10 final examination. Their grades range from 2.1 to 2.3.

In addition to that, the table also shows the basic information of trainers who responded to the questionnaire. Out of 22 trainers, 13 (59.1%) had filled and returned the questionnaire. All the trainers who filled the questionnaire were male, out of which 4 (30.8%) were diploma holders, 7 (53.8%) were degree holders and 2 (15.4%) were diploma and postgraduate diploma holders in different specialized areas. Seven of the trainers (53.8%) had more than 20 years of service whereas only 3 (23.1%) were having 1-5 years of service. Although 7 (53.8%) of the trainers were degree holders most of them were not directly specialized in leather and leather products. Rather they were chemists or chemical and mechanical engineers.

Attitudes of Respondents Towards Vocational Training

Out of 13 trainers, 9 (69.2%) reported that they had attended different refresher courses and found that the courses were relevant for their work. All the 21 trainees (100%) and 13 trainers (100%) testified that they are interested in vocational training. Out of 21 trainees, 15 (71.4%) said the major factor which promoted them to choose this field of training or vocational training is due to the belief that the training promised employment opportunities. Whereas only 4 (19%) of the trainers said the teachers' influence was the major factor for choosing vocational training. Seven (33.3%) trainees answered the

second major factor which influenced their choice of vocational training is the belief that they would have access to further education. On the other hand, 6 (28.6%) of them said access to education is the third major factor for choosing vocational training.

On the other hand, out of 13 trainers who responded to the questionnaire, 7 (53.8%) said the first factor for choosing this field of training is the belief that it has access to further education where as only 4 (30.8%) said it is due to the fact that the training promised employment opportunities. Three respondents (23.1%) answered the second factor which promoted to chose this field of training is due to employment opportunities and access to further education.

From the above data, it is possible to trace that trainees had interest in vocational training due to the belief that the training promised employment opportunities. On the other hand, trainers developed interest in the field since they thought that it has access to education.

Eighteen of the trainees (85.7%) replied that they were assigned by Addis Ababa Education Bureau to their present field of study or training. Again 18 (85.7%) of them said, they have no problem which forces them to withdraw from their study, but few trainees (3 - 14.3%) were complaining that they have transport/financial problem which is a stumbling block to pursue their study. This data indicates that trainees are facing transport problems as the institute is situated very far from the city.

Regarding guidance the trainees need to get in the selection of training, 3 (23.1%) trainers pointed out the trainees should get advice from all possible ways such as parents, school friends, teachers, school counselors and media advertisement. Equal number of trainers (2 - 15.4%) said trainees should get advice from teachers, parents and media advertisement.

With respect to the sufficiency of the period allotted for practical session, 18 (85.7%) of the trainees and 7 (53.8%) of the trainers

replied that it is sufficient whereas equal number of trainers 3 (23.1%) answered it is moderately sufficient and not sufficient. The data shows that the period allotted for practical session is sufficient. All of the respondent trainees 21 (100%) and trainers 13 (100%) believe that the subject matter taught is more applicable to practical life or the job market. Of course, such type of training based on latest technology would have to be applicable to the real world.

Table 2: The adequacy of Workshop Facilities of the Training Center

Respondents Category		I/RA	%	A	%	V.A/E	%	I/R.A	%	A	%	V.A/E	%
Leather processing	a	1	20	-	-	4	80	-	-	1	20	4	80
technology	b	3	60	1	20	1	20	1	20	2	40	2	40
	c	-	-	5	100	-	-	-	-	5	100	-	-
	d	1	20	3	60	1	20	3	60	2	40	-	-
Leather good	a	-	-	3	50	2	50	-	-	1	50	1	50
technology	b	-	-	4	66.8	2	40	1	16.67	1	50	-	-
	c	-	-	2	33.3	4	80	2	33.33	-	-	-	-
	d	-	-	2	33.3	4	80	1	16.67	-	-	1	50
Leather garment	a	1	20	4	80	-	-	1	50	-	-	1	50
technology	b	2	40	1	20	2	40	-	-	2	100	-	-
	c	1	20	1	20	3	60	2	100	-	-	-	-
	d	-	-	4	80	1	20	1	50	-	-	1	50
Footwear	a	-	-	2	40	3	60	-	-	2	50	2	50
technology	b	2	40	-	-	3	60	-	-	4	100	-	-
	c	2	40	2	40	-	-	3	75	1	25	-	-
	d	-	-	-	-	5	100	1	25	2	50	1	25

Key I - Inadequate, R.A- Rarely adequate, A-Adequate, V.A- Very adequate, E-Excellent,
a- Equipment/machines, b- hand tools c- Teaching aids d- Raw materials.

Table 2 shows the rating of trainees and trainers on the adequacy of workshop facilities such as equipment/machines, hand tools, teaching aids and raw materials in their respective departments. The rating varies from inadequate to excellent for each specified facility.

In leather processing technology department, 4 (800%) trainees trainer replied that the equipment/machines were either very adequate or excellent. Again 1 (20%) trainee and 3 (60%) trainers said the equipment/machines were very adequate. Whereas in leather goods technology department, half of the respondent trainees and 1

(50%) trainer indicated that the equipment/machines were adequate. On the other hand, 2 (33.3%) trainees and 1 (50%) trainer replied that they were very adequate. In the case of leather garment technology, 4 (80%) trainees replied adequate and one trainer replied very adequate. In footwear technology 2 (40%) trainees and 2 (50%) trainers rated the equipment/machines as adequate. On the other hand, 2 (40%) trainees and 1 (25%) trainer replied they were very adequate or excellent. This data shows that the institute has no significant problem with regard to equipment. With respect to the adequacy of hand tools in different departments, 1 (20%) of the trainees and 2 (40%) of trainers in leather processing technology reported that they were very adequate or excellent. On the contrary, 2 (40%) trainees and 1 (20%) trainer replied that the hand tools were inadequate or rarely adequate. In leather goods technology, 4 (66.8%) trainees and 1 (50%) trainer said they were adequate. In leather garment technology, 2 (40%) trainees reported that they were either very adequate or excellent, but the trainers replied that they were just adequate. In footwear technology, 2(40%) trainees replied that the hand tools were either very adequate or excellent but 4(100%) trainers said that they were adequate. This shows that the hand tools available in different departments of the institute ranges from adequate to very adequate.

The adequacy of teaching aids as ranked by the respondents; show that all of the trainees and trainers in leather processing technology department replied that they are adequate. Majority of trainees (4 - 66.7%) in leather goods technology replied that they are either very adequate or excellent whereas the trainers 2 (100%) responded they are either inadequate or rarely adequate. Similarly, in leather garment, 3 (60%) trainees replied they are very adequate, but 2(100%) trainers said they are either inadequate or rarely adequate. In footwear technology, 2 (40%) trainees and 1 (25%) trainer reported that the teaching aids were adequate, but 2 (50%) trainers responded that they were inadequate or rarely adequate. The data shows that more needs to be done to avail sufficient amount of teaching aids to facilitate the teaching learning process.

With regard to the adequacy of raw materials, 3 (60%) trainees and 2 (40%) trainers of leather processing technology reported that they were adequate. In leather goods, 4 (66.8%) trainees replied that they were either very adequate or excellent. In leather garment, 4 (80%) trainees replied that they are adequate. Again in footwear, 3 (60%) trainees and 2 (50%) trainers approved that the raw materials were adequate. The interview with the head of the institute revealed that they obtain raw materials like leather from the market and process it in the institute workshop and utilize it to produce leather garments and goods. It can be inferred that the availability of raw materials in the institute were adequate for the training purpose.

Table 3: Regarding the Equipment/Machines Available in the Workshop

Respondents Category		N.S/B.S	%	S	%	M.S/E	%	N.S/B.S	%	S	%	M.S/E	%
Leather processing technology	a	-	-	2	40	3	60	-	-	2	40	3	60
	b	-	-	3	60	2	40	-	-	3	60	2	40
	c	1	20	2	40	2	40	-	-	2	40	3	60
	d	-	-	2	40	3	60	1	20	3	60	1	20
	e	-	-	-	-	5	60	-	-	1	20	4	80
Leather good technology	a	-	-	-	-	6	100	-	-	-	-	2	100
	b	-	-	2	33.3	4	66.7	2	100	2	100	-	-
	c	-	-	4	66.8	2	33.3	2	100	-	-	-	-
	d	1	16.6	3	50	-	-	2	100	-	-	-	-
	e	1	16.6	-	-	5	83.3	-	-	-	-	2	100
Leather garment technology	a	-	-	4	80	-	-	-	-	1	50	1	50
	b	1	20	1	20	4	80	1	50	1	50	-	-
	c	1	20	2	40	2	40	2	100	-	-	-	-
	d	1	20	-	-	4	80	2	100	-	-	-	-
	e	-	-	-	-	5	100	-	-	1	50	1	50
Footwear technology	a	-	-	2	40	3	60	-	-	2	50	2	50
	b	1	20	2	40	2	40	2	100	1	25	1	25
	c	1	20	2	40	2	40	1	25	3	75	-	-
	d	-	-	1	20	4	80	2	50	2	50	-	-
	e	-	-	-	-	5	100	-	-	1	25	3	75

Key N.S - not satisfactory, B.S- Barely satisfactory S- Satisfactory, M.S- More than satisfactory E- Excellent, a- Relevance to local situation b- appropriateness to the local contents of the curriculum, c- appropriateness to the capacity of the trainer, d- appropriateness to the capacity of the trainees e- up-to-datedness

Table 3 describes the rate given by respondents regarding the machines available in the workshop of the departments of the institute.

Trainees and trainers of leather processing, rated the relevance of the equipment/machines to the local situation as satisfaction to excellent. But in leather goods, majority (5 - 83.4%) of trainees rated them as either more than satisfactory or excellent. In leather garment, most of the trainees said it is satisfactory, but the trainers replied satisfactory to moderate. In footwear technology, it ranged from satisfactory to excellent. With regard to the appropriateness of the equipment or machines to the local contents of the curriculum, the capacity of the trainer and trainees, in leather processing the response of trainees and trainers are the same, that is, from satisfactory to excellent. In leather goods, the trainees reported from satisfactory to excellent, but trainers reported satisfactory for the content of the curriculum and not satisfactory for the other two parameters. In the case of leather garment, the range varies from barely satisfactory to excellent for the above-mentioned parameters except that trainers replied not satisfactory for the capacity of trainers and trainees. Coming to footwear again, the range varies from barely satisfactory to more than satisfactory, except that 2 (40%) trainees reported the capacity of trainees to be either more than satisfactory or excellent. Up-to-dateness of the equipment was reported by the majority of trainees and trainers.

It can be understood from the above analysis that the relevance of the equipment to the local situation for all departments was satisfactory. The appropriateness of the equipment /machines to the local contents of the curriculum, the capacity of the trainer and trainees in all departments ranged from satisfactory to excellent except that trainers of leather goods and leather garment reported not satisfactory in the case of capacity of trainer and trainees. In the case of leather garment, the range was from barely satisfactory to excellent. This implies that the capacity of trainers needs to be upgraded.

Except leather good trainees, all the rest did not produce marketable projects/ product. They are engaged in producing part of the product or involved in the process of doing the project. The leather goods trainees had already started producing some marketable projects like belts, wallets etc. The reason may be because it took more time, raw materials etc to produce marketable projects in the other departments. The trainers also said that trainees were involved in the production process of marketable projects.

Out of 13 trainers, 10 (76.9%) of them replied that they do make creative attempts to prepare teaching aids from locally available materials. The institute must encourage this effort by providing required materials for trainers.

Regarding the performance of the trainees during class activity, out of 13 trainers, 11 (84.6%) replied that their performance is satisfactory. With respect to the capacity of trainers, an equal number i.e. 10 (47.6%) of the trainees have replied as adequate and also 10 (47.6%) trainers as either more than satisfactory or excellent. But it is very important to upgrade the capacity of trainers by providing some sort of trainings. Regarding the sufficiency of trainers, 7 (53.8%) of the trainers said that they are not sufficient. Again, 13 (61.9%) trainees also said the same. Therefore, it implies that additional number of trainers needs to be recruited.

Regarding the job placement of graduates, 5 (38.5 %) of the trainers said that teachers and graduates' efforts play a significant role to obtain jobs for graduates, but 2 (15.4 %) of the trainers replied that only the graduates should make their own efforts to secure jobs for themselves. The researcher suggests that efforts should be made by the institute to create links with various organizations or it is good if the institute has nominated a personnel who is in charge of trainees' guidance, counseling, apprenticeship arrangement and tracer study.

Table 4: The Quality of Vocational Training Obtained by the Trainees

Respondents Category		Trainees					Trainers								
		N.S/B.S	%	S	%	M.S/E	%	N.S/ B.S	%	S	%	M.S/E	%	N.R	%
Leather processing technology	A	1	20	3	60	-	20	1	20	2	40	2	40	-	-
	B			3	60	1	20	1	20	3	60	1	20	-	-
	C	2	40	-	-	2	20	2	40	2	40	1	20	-	-
	D			3	60	-	40	3	60	1	20	1	20	-	-
	E	2	40	1	20	2	-	2	40	2	40	1	20	-	-
	F	1	20	1	20	-	60	1	20	3	60	1	20	-	-
	G	-	-	1	20	3	20	2	40	1	20	1	20	1	20
Leather goods technology	A	-		5	83.4	-	16.6	-	-	-	-	2	100	-	-
	B	-	-	3	50	2	16.6	-	-	1	50	1	50	-	-
	C	3	50	2	33.4	-	16.6	1	50	1	50	-	-	-	-
	D	1	16.6	2	33.4	1	33.4	-	-	2	100	-	-	-	-
	E	2	33.4	4	66.6	-	-	1	50	-	-	1	50	-	-
	F	-	-	3	50	1	33.4	-	-	-	-	2	100	-	-
	G	--	-	-	-	3	50	1	50	1	50	-	-	-	-
Leather garment technology	A	-	-	3	60	2	-	-	-	-	-	2	100	-	-
	B	1	20	1	20	3	-	-	-	-	-	2	100	-	-
	C	1	20	2	40	1	20	1	50	1	50	-	-	-	-
	D			1	20	2	40	-	-	1	50	-	-	1	50
	E	1	20	3	60	1	-	1	50	-	-	1	50	-	-
	F	1	20	-	-	2	40	-	-	1	50	1	50	-	-
	G	-	-	2	40	1	40	-	-	1	50	-	-	1	50
Footwear technology	A	-	-	3	60	2	-	1	25	2	50	-	-	1	25
	B	2	40	2	40	-	20	-	-	3	75	-	-	1	25
	C	4	80	1	20	-	-	1	25	2	50	-	-	1	25
	D	-	-	2	40	-	40	1	25	2	50		-	1	25
	E	1	20	2	40	2		-	-	3	75	-	-	1	25
	f	1	20	-	-	2	40	-	-	2	50	1	25	1	25
	g	-	-	1	20	-	80	3	75	-	-	-	-	1	25

Key:- a- content of instruction b- method of instruction c- planning of the program d- trainees achievement e- ability and skill of administrators f- trainer- trainee relationship g- Job opportunities

N.S- Not satisfactory B.S- Barely satisfactory S- Satisfactory M.S- More than satisfactory E- Excellent

N.R – Not replied

Table 4 depicts the quality of vocational training obtained by the trainees with respect to different parameters. With regard to the content of instruction of the institute, the majority of trainees, 3 (60%) of leather processing rated satisfactory, but equal number of trainers, 2 (40%) of the same department replied as satisfactory and more than satisfactory. Almost all trainees, 5 (83.4%) of leather goods agreed that the training was satisfactory, whereas the trainers who responded to the questionnaire (2 - 100%) replied that it is either more than

satisfactory or excellent. In leather garment and footwear technology 3 (60%) of the trainees agreed that the training was satisfactory while the trainers replied it was more than satisfactory.

Regarding the method of instruction, equal number of trainees and trainers 3 (60%) of leather processing agreed that it was satisfactory. Almost half of trainees, 3 (50%) and 1 (50%) of the trainer replied that it was satisfactory. In the case of leather garment department, majority of respondents agreed that it was more than satisfactory. It is different in footwear technology as the trainees gave different rating, but majority of trainers 3 (75%) agreed that it was satisfactory.

The quality of vocational training with respect to planning of the program as judged by trainees and trainers of all four departments vary from not satisfactory to excellent. The data showed that more efforts to be done to improve the planning of the program. With regard to trainees' achievement, 3 (60%) trainers of leather processing replied that it was either not satisfactory or barely satisfactory but similar number of trainees of the same department rated this point as satisfactory. In leather goods, the trainers replied satisfactory but trainees gave different ranks, which varied from barely satisfactory to excellent. The leather garment and footwear trainees also gave a range between satisfactory to excellent.

Ability and skill of administrators as judged by respondents of the four departments varies from barely satisfactory to excellent. The data showed that a refresher program would be better arranged to further improve the skill and performance of administrators. Regarding trainer-trainee relationship, in leather processing, 3 (60%) of the trainees replied either more than satisfactory or excellent, but similar number of trainers witnessed that it was satisfactory. In the case of leather goods technology, half of the respondents 3 (50%) agreed it was satisfactory, whereas their trainers replied that it was more than satisfactory. In the case of leather garment and footwear technology, the range varied from barely satisfactory to excellent. Job opportunities in trainees' opinion in all the four areas ranged from satisfactory to excellent.

The above data show that the content and method of instruction being employed in the institute was satisfactory. However, more effort could be made to further improve the situation for better result. There is a need to improve the planning of the program by arranging meetings with responsible bodies. It is also important to improve trainees' achievement by tracing out and solving trainee difficulties for implementation of the program. It is also important to improve the ability and skill of administrators by providing some sort of refresher program. Trainer-trainee relationship in the institute varied from satisfactory to excellent. Hence, it would be good if this type of atmosphere could be encouraged in the training centers to improve the quality of vocational training. Trainees have good attitude about their department in that they believed that job opportunities were satisfactory to excellent. To fulfill their ambition, it would be good if further links with employing organizations be strengthened so as to secure jobs for trainees.

Regarding the factors which determine the employability of vocational graduates out of 21 trainee respondents, 13 (61.9%) and 7(53.8%) trainers ranked strengthening the relationship between training centers and employing agencies as the most important factor and 7(33.3%) trainees ranked trainees achievement as second most important factor, whereas 4 (30.7%) of the trainers suggested improvement in curriculum to be a second most important factor. Seven (33.3%) trainees and 5(38.5%) trainers ranked that administrative and teaching capacity of the staff/institute as a third factor. The data show that it is highly significant to strengthen the relationship between training centers and employing agencies in the first place and trainees also need to get more awareness so that they prepare themselves for challenges ahead and on top of that administrative and teaching capacity of trainers need to be upgraded for effective learning.

The major problems that hindered the implementation of vocational training programs in the institute have been stated to be:

By trainees

- transport problem;
- lack of books for main and common courses;
- shortage of experienced teachers i.e. teachers lack educational background; they come from factories;
- lack of machinery;
- shortage of hand tools – leather garment department; and
- unable to start practical work by ourselves – leather processing department.

By trainers

- lack of sufficient trainers;
- lack of classroom / lecture rooms;
- lack of efficient and quality administrative management capacity ;
- lack of sufficient raw material for practical training;
- some trainees being small (16 yrs old); they are finding it difficult to operate big/ heavy machines;
- excess training hours for practical – leather processing;
- lack of enough teaching aids ;
- most of the teachers were not well qualified and experienced in the field which they were assigned to teach;
- workshop not being functional – leather processing;
- limited number of trainees with regard to the need of the leather sector; and
- lack of improvement in teaching techniques.

By the head of the institute

- lack of sufficient trainers/lack of human resource
- accessories are not easily available
- turnover of skilled trainers

The major strategies used in the institute to overcome the above-mentioned problems:

- while the trainees reported that nothing has been done to overcome the problems, the trainers replied:
    - it is planned to build a new building with classrooms;
    - gave more theory lesson during practical lesson (leather processing); and
    - very short term courses are prepared in the institute and abroad to upgrade their standard.

Suggestions given by the respondents to improve the vocational training programs of the institute:

By trainees

- provision of transport facility or bus ticket;
- supply of books through different means e.g. NGO;
- science students should be preferred to join leather processing technology as it is more of science;
- trainees admission should be based on their interest;
- more awareness work to be done so that many people know about the training and develop interest;
- training teachers;
- provision of sufficient materials;
- recruit more qualified teachers; and
- improve curriculum , workshop facilities, instruments.

By trainers

- selection of students to be made by the institute because physical fitness is very important for the training e.g. sight problem is serious case for drafting, leather garment and leather goods training;
- trainers need skill improvement to provide quality training;
- relationship between employing agencies and the institute should be strengthened;
- assessing curriculum to maintain international standard;
- building additional classroom;
- recruiting qualified teachers;

- the number of trainees in each department should be determined according to the need of the labor market or the sector;
- training the management staff with relevant training such as administrative and leadership quality ;
- train the instructors in specific vocational field abroad or through expatriate support;
- development of teaching infrastructure facilities /workshops/ laboratories;
- follow the strategies undertaken by the institute and bring international support to upgrade the quality of instruction;
- training should be offered to fulfill the need of the sector i.e. trainees should acquire the relevant technology to be performed in factories so as to answer the need of factories, i. e., tanneries, shoe and leather garments and goods factories. The training should answer their need of trained manpower; and
- the period set for training abroad is 1 – 4 months in India. This is from financial point of view. But leather technology largely emanated from western countries. Thus, it is difficult to get very reliable instructors which could ultimately help the sector to produce capable candidates who can fit in the industries or create self-employment easily.

By the head of the institute

- providing short term training for trainers;
- appointing expatriate teachers;
- appointing graduates from university and giving practical training;
- sending trainers abroad for short term training; and
- equipping the institute with latest machinery and equipment so as to utilize the institute to full capacity and make the institute competitive in the international leather sector.

Summary and recommendations

Summary

Vocational education is emerging as the cornerstone for implementation of human resource development strategies. Literature on human resource development and vocational education in less developed countries suggests that the development of these countries related to their ability to develop and utilize their human resources effectively (Middleton et al, 1993)
Human resource development strategies in less developed countries embraced vocational education as the magic cure for the lack of skilled workers to meet the demand of the economy, reduce unemployment by proving individuals with employable skills, and enhancing attitudes towards blue collar work (Middleton et al, 1993; Middleton and Ziderman, 1997)

From the above discussion the major findings can be summarized as follows.

- Although there is growing realization of the importance of vocational training for development, limited absorptive capacity of the economy and weak linkage of the training center with employing agencies and apprenticeship offering companies adversely affected the viability of vocational training programs.
- Trainees are facing transport problem as the institute is very for away from the city.
- The data showed that there exists sufficient amount of teaching aids to facilitate the teaching learning process.
- Although 7 (53.8%) of the trainers were degree holders, most of them were not directly specialized in leather and leather products. Rather, they were chemists or chemical and mechanical engineers.
- Efforts made by the institute to create links with various organizations or to nominate personnel who will be in

charge of trainee guidance, counseling, apprenticeship arrangement and tracer study was not satisfactory.

- The supply of spare parts and maintenance of the equipment used in the institute was inadequate.
- It is important to improve trainee achievement by having discussion or meeting with them and tracing out and solving their difficulty for better implementation of the program.
- There exists good trainer-trainee relationship; such type of relation is good if encouraged in the training centers to improve the training approach.
- Trainees have developed good attitude about their department in that they believed that job opportunities were satisfactory to excellent. They have developed such type of interest after joining the institute. However, more promotion/ awareness work has yet to be done to attract outstanding trainees to the institute.
- The data clearly show that it is highly significant to strengthen the relationship between training centers and employing agencies and trainees also need to get more awareness so that they prepare themselves for challenges ahead. On top of that, administrative and teaching capacities of trainers need to be upgraded for effective learning.

Recommendations

Based on the above analysis, the following policy suggestions are drawn out.

- Some measures must be taken to solve the transport problem. For instance, public transport service like that of city bus could be arranged.
- The institute must encourage and support trainers to prepare teaching aids out of locally available materials by providing required materials so as to facilitate the teaching learning process.

- Availability of spare parts and maintenance facilities need to be strengthened.
- The capacity of trainers needs to be upgraded to make them familiar with the latest technology and thereby facilitate the teaching–learning process.
- Training opportunities should be devised both in local institutions and universities abroad.
- The education bureau must involve responsible persons from the institute during assigning trainees because it needs to consider sight problem and so on. In addition, guideline for implementation of apprenticeship and the necessary legal business and concerned government bodies should prepare economic environment for self-employment schemes.
- Vocational training by itself will not create jobs. Hence, the joint effort and commitment of the government, NGO, private sector, training centers, chambers, employers' association and other stakeholders is essential in widening the employment options for the graduates and for tracer studies.
- There is a need to improve the planning of the program by discussing with responsible bodies.
- There should be close linkage with employing agencies regarding curriculum development, apprenticeship and job placement. Moreover, better information system on current labor market need should be developed.

References

COMESA/LLPI. (2002). *Report of the Fourteenth Meeting of the Board of Directors of the COMESA Leather and Leather Products Institute*, Addis Ababa.

COMESA/LLPI. (2004). *Current Status and an Outlook for the Leather Sub Sector, presented to the 18th Annual Conference of the Ethiopian Veterinary Association (EVA) By Dr. Tadesse Hailemariam*', Addis Ababa.

Hallak, J. and F. Caillods.(eds.). (1995) **Educational Planning: the International Dimension.** New York: Garland Publishing, Inc.

ILO. (1993). **Ethiopia Towards Employment Promotion** Addis Ababa: ILO.

ILO. (2002). **Ethiopian Technical and Vocational Education and Training Strategy.** Addis Ababa**:** Berhnena Selam Printing Press.

Mellahi, K. (2000). *Human resource development through vocational education in Gulf cooperation countries: the case of Saudi Arabia*, **Journal of Vocational Education and Training Vol. 52, No.2**

Middleton, J. and A. Ziderman (1997). *Overview: World Bank Policy Research on Vocational Education and Training (Skills Training in Developing Countries: financial and Planning Issues)*', **International Journal of Manpower, 18 (1-2)**

Middleton, J., Ziderman, A. and Adams, A. V. (1993). **Skills for Productivity: Vocational Education and Training in Developing Countries.** New York: Oxford University Press.

Ministry of Trade and Industry. (1997). *A Revised Proposal for the Establishment of a Leather and Leather Products Training and Development Institute*, Addis Ababa (unpublished)

TGE. (1994). **The Education and Training Policy.** Addis Ababa: EMPDA.

The World Bank Group.(2003). **World Development http:// www. World bank.org /data**

UNDP. (2003). **Human Development Reports. http:// www.undp.org/hdr**

United Nations. (1979). **Symposium on Inter Relations Between Resources, Environment, Population and Development**. Stockholm.

Wanna Leka. *(1996). Policies and Practices and Problems of Vocational/Technical Education and Training in Ethiopia*, *In Habtamu Wondimu (ed.)*. **Research Papers on the Situation of Children and Adolescent in Ethiopia**. Addis Ababa: AAU Printing Press

Wilkins, S. (2001). *Human Resource Development through Vocational Education in Gulf Cooperation Countries: the Case of Saudi Arabia*, **Journal of Vocational Education and Training Vol. 52, No.2**