

# IMPLEMENTATION OF QMS ISO 9001/2000

CASE STUDY OF SELECTED ETHIOPIAN LEATHER PROCESSING FACTORIES

DEPARTMENT OF MANAGEMENT (MBA PROGRAM)

*A study offered in partial fulfillment of the requirements for the degree of Masters of Business Administration*

PREPARED BY: - *Benyam Atnafe GSR/281/00*

SUBMITTED TO: - Dr. Salehu Anteneh

ADDIS ABABA UNIVERSITY  
FACULTY OF BUSINESS AND ECONOMICS  
ADDIS ABABA

June 2009

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*Benyam Atnafe  
June 2009*

**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**  
**MBA PROGRAM**

“IMPLEMENTATION OF QMS ISO 9001:2000 - Case study of selected Ethiopian leather exporting & processing organizations”

By: - Benyam Atnafe    GSR/0281/00

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| Examiner | _____                     | _____     |

## **STATEMENT OF DECLARATION**

I, Benyam Atnafe declare that this study entitled, “IMPLEMENTATION OF QMS ISO 9001:2000 - Case study of selected Ethiopian leather exporting & processing organizations” is my own effort and study. I have carried out the study independently with the guidance and support of my research advisor. This study has not been submitted for award of any degree or diploma program in this or any other institution and that all source materials are duly acknowledged. It is offered here in partial fulfillment of the requirements for the degree of Master of Business Administration MBA).

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Benyam Atnafe

## **STATEMENT OF CERTIFICATION**

This is to certify that Benyam Atnafe has carried out his research work on the topic entitled, “IMPLEMENTATION OF QMS ISO 9001:2000 - Case study of selected Ethiopian leather exporting & processing organizations”, independently under my guidance. The work is original in nature and is suitable for submission to fulfill the partial requirements of the master’s degree in Business Administration MBA).

Advisor: Salehu Anteneh Dr.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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## List of Acronyms

|         |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| ASSOMAC | Associazione Nazionale Costruttori Macchine dell' Area Pelle                         |
| BPR     | Business Process Reengineering                                                       |
| CB      | Accredited Certification Bodies                                                      |
| COMESA  | Common Market for Eastern and Southern Africa                                        |
| COTANCE | Confederation of National Associations of Tanners and Dressers of the European Union |
| ECPB    | engineering capacity building program                                                |
| ECPC    | the Ethiopian Cleaner Production Centre                                              |
| EIC     | Ethiopian Investment Commission                                                      |
| ELIA    | Ethiopian Leather Industries Association                                             |
| EPZ     | Export Processing Zone                                                               |
| EU      | European Union                                                                       |
| ETFLGMA | Ethiopian Tanners Footwear, Leather Goods Manufacturers Association                  |
| FDI     | Foreign direct investment                                                            |
| FEMSEDA | Federal Medium and Small Enterprises Development Agency                              |
| GTZ     | German Technical Cooperation's                                                       |
| HRD     | Human resources development                                                          |
| H&S     | Hides and Skins                                                                      |
| ISO     | International Standards Organization                                                 |
| LLPI    | Leather and Leather Products Industry                                                |
| LLPTI   | Leather and Leather Products Institute                                               |
| MEDaC   | Ministry of Economic Development and Cooperation                                     |
| MoARD   | Ministry of Agriculture and Rural Development                                        |
| MoCB    | Ministry of Capacity Building                                                        |
| MoFED   | Ministry of Finance and Economic Development                                         |
| Mol     | Ministry of Infrastructure                                                           |
| MoJ     | Ministry of Justice                                                                  |
| MoR     | Ministry of Revenues                                                                 |
| MoTI    | Ministry of Trade and Industry                                                       |
| PIC     | Productivity Improvement Center                                                      |
| PLC     | Private Limited Company                                                              |
| PPP     | Public-private partnerships                                                          |
| QMS     | Quality Management System                                                            |
| QSAE    | Quality Standards Authority of Ethiopia                                              |
| R&D     | Research and development                                                             |
| SMEs    | Small and medium sized companies                                                     |
| STC     | the Science and Technology Commission                                                |
| SWOT    | Analysis of Strengths, Weaknesses, Opportunities and Threats                         |
| TDA     | Top Down Pull Approach                                                               |
| UNIDO   | United Nations Industrial Development Organization                                   |

## ABSTRACT

*The LLPI Leather and Leather Products Industry of Ethiopia generates the second major export income of the country with between 10 and 20 % of total foreign earnings. International market is sensitive to regulations and standards like, environment, safety and quality; where ISO: 9001 certification for quality management system is currently a popular requirement for the industry. It is claimed that installing quality management system not only boosts market competitiveness but enhance efficiency, productivity and profitability. This study addresses the importance, challenges, assistance and gap analysis in implementation of ISO 9001:2000 in selected organizations in the LLPI. The industry is stratified under tannery, foot wear, and leather products. 25 organizations were selected that represent 73% of the tanneries, 38% of the footwear manufacturers and 29% of the leather product manufacturers of the country. Cluster samples of Addis Ababa, D/Zeit, Nazreth and Modjo were used due to concentration on these areas. The study is descriptive and explanatory in nature where both primary and secondary data are in use.*

*Despite the grueling requirements of the international market only two organizations has been certified. The advantages to be gained due to ISO certification includes new market entry, better price, and maintenance of customers that lead to profitability and growth of the organization. Also, productivity could be boosted with increased efficiency and effectiveness in internal management processes. The challenges faced include the cost of certification, time and effort needed to develop required documentation and infrastructure to satisfy the requirements. The lack of commitment by owners of the organizations is also a major set back observed. Even there are various support organizations working around the leather industry only few focused on the certification of ISO 9001:2000. In the gap analysis unsatisfied requirements by most of the organizations include; lack of proper QMS documentation, procedure and records, poor product realization tools, missing infrastructure, poor quality objective setting, and lack of continuous improvement tools. Hence, a lot remains by support organizations in creating awareness and devising means to eliminate the challenges faced in the certification processes. With the accreditation of the Quality and Standard Authority of Ethiopia QSAE for ISO 9001 certification; major part of the industry could be certified with reasonable cost and effort, by restructuring their existing documents, management system and infrastructure if the commitment of the owners of the organizations is gained.*

# 1. INTRODUCTION

## 1.1 BACKGROUND OF THE STUDY

The largest number of livestock in Africa and the tenth largest in the world are found in Ethiopia with at least 40 million people owning livestock. On average, Ethiopia has the capacity to supply 16 to 18 million pieces of hides and skins to local tanneries. Kiruthu 2008,p 3.

During the past two decades leather and semi-processed hides and skins have constituted the second major export product of the country with between 10 and 20 % of total foreign earnings, second only to coffee with the potential to exceed it. But in terms of manufactured products, the leather sector still ranks first. Muchie 2007: p539

The leather and leather products industry LLPI in Ethiopia exports primarily to the Europe Union, followed by Asia, the Middle East, USA and COMESA. The EU market however is sensitive to regulations and standards like, environment, safety and quality.

<http://www.ethioexport.org>

Ethiopian companies therefore have to learn to deal with these requirements. This study specifically tries to address issues like importance, challenges and possible assistance in Quality Management system ISO 9001:2000 implementation which is a requirement for exporting to a lot of these clients.

Currently ISO 9001 certification is seen as offering very real and tangible benefits to companies. Some benefits of Management System Certification mentioned are: Business and operational efficiency and effectiveness, Greater consistency of products and services, Improve customer and stakeholder satisfaction, reducing incidents that result in liability, manage the social, environmental and financial risks, reduce costs and increase profit, assist to achieve continual improvement and business sustainability. Naveh. E., Marcus, A., 2004, p92.

In this study “IMPLEMENTATION OF QMS ISO 9001:2000 - Case study of selected Ethiopian leather exporting & processing organizations” it is attempted to see the elements of the standard that makes the above claimed benefits possible. The study also tries to make a

gap analysis of how far organizations under the study fulfill the requirements of the ISO: 9001 standard.

## 1.2 STATEMENT OF THE PROBLEM

Despite the export market increased trend for ISO 9001 certification requirements; only two organizations in the leather and leather products industry LLPI in Ethiopia have been able to get certified. Organizations in the industry because of cost, lack of awareness and proper assistance are reluctant to the certification process losing critical competitive advantages in the international market on the other hand. This ultimately has the potential to affect the foreign currency earned by the country, employment rate by the industry and the efficiency of the livestock value chain.

## 1.3 RESEARCH QUESTIONS

This study focuses on four basic research questions, which are;

1. What is the importance of ISO 9001 certification for organizations under the LLPI in Ethiopia?
2. How far do the organizations fulfill the requirements of ISO 9001:2000 by their existing system?
3. What are the challenges in implementation of ISO 9001:2000 in the LLPI of Ethiopia?
4. What is the extent of support available in implementation of ISO 9001:2000 in the leather sector?

## 1.4 OBJECTIVES OF THE STUDY

The general objective of this study was to investigate the current implementation of QMS and ISO standard by case organizations and evaluate the degree of fulfillment of

these requirements Gap analysis . That is how the QMS is implemented in accordance with resource management, infrastructure, documentation, work environment, planning, product realization and customer focus gap analysis and evaluation .

This study, also tried to address the importance, challenges and available assistances in the implementation of QMS ISO 9001:2000. While the following specific objectives were expected to be addressed by the study;

- Evaluate the scope of QMS tools such as continuous improvement, customer focus implementation in the sector; and identify what other management tools organizations depend on in those that lack it.
- Investigate the extent of availability of documentation and records necessary for QMS such as quality manual, policy, process charts...
- Asses the management and owners involvement in planning, assigning responsibility, authority, and communication as well as providing resources and reviewing quality and management systems.
- Analyze the resource management aspect in human resource, infrastructure, and work environment.
- Identify various product realization processes which are customer related, design and development, purchasing, production and service provision, calibration and review how they are handled.
- Evaluate measurement, analysis and improvement tools used by organizations.
- Analyze the advantages and disadvantages of implementing QMS with the pros and cons of changing the traditional system to ISO 9001 certifiable system.
- Scrutinize assistance gained from support agencies and assistance provided on working towards ISO: 9001 accreditation.

## 1.5 SIGNIFICANCE OF THE STUDY

This paper was designed to address problems faced on implementing quality management system ISO 9001 by processing and exporting organizations in the leather industry of Ethiopia and disclose the strength and limitations of their existing system. Failure to implement the QMS, could lead to lose in competitive advantage in international market, foreign currency for the country, business operation efficiency and effectiveness. This will ultimately have an effect on the efficiency of the livestock value chain which a considerable population livelihood depends on. Accordingly, this paper tried to recommend ways to correct this deficiency and suggest appropriate strategies that will enable the best utilization of quality management system.

A well designed and applied QMS implementation method enables a considerable proportion of the industry to be certified for ISO. Organizations prefer to work with effective methods and cost efficient process for certification. That is why this study tried to address authorities and development agencies which work towards this goal.

From start up cost to operational ones maintenance, the cost of implementing QMS might seem too much. However, in most of the cases it is justifiable. This paper tried to examine cost minimization methods, like reforming the existing management system and documentation to the requirements of ISO certification.

This paper could be of value to the leather and leather products industry LLPI in Ethiopia and development agencies working towards quality. Also, it could serve as background for others who are interested in making studies in this area.

## 1.6 JUSTIFICATION

Leather export sector is crucial in the development and support of society: especially in developing countries like Ethiopia where a major source of national income depends on exporting raw materials. Ethiopia having an abundant livestock resource major population livelihood depends on it. In view of that, in their continuous challenge to



provide economic, effective, and efficient service to the sector, development agencies have devised many strategies to meet the need of the sector. One of those tools is quality management system. The use of ISO: 9001 certification to enhance our countries leather and leather products industry LLPI competitive advantage in the international market; justifies a considerable evaluation.

## 1.7 METHODOLOGY

The study is explanatory and descriptive by its nature. Both primary and secondary data sources are used for this study: The primary data was collected from questionnaires, interviews and observation. Questionnaire was developed that assess the various objectives of the study. Interviews were conducted for some of the concerned people in the organizations, professionals in the field of quality support agencies and government officials. The secondary data include internally generated documents by the organizations like organizational profiles, Quality manuals, policies, process charts, and annual reports as well as external sources such as information from the internet, feasibility studies, books, periodicals, brochures, and other similar materials available.

### ***SAMPLING DESIGN***

This research study was conducted on the basis of convenience sampling technique. That is geographical location of organizations, willingness to respond and under the time and budget constraints. Data was collected on stratified sampling based on geographical location. Secondly the size, complexity and nature of organizations are considered within these categories.

The sample taken was analyzed to describe the overall picture of ISO 9001 implementation in the organizations included in this case study. Since, these organizations are the key players in the industry the study represent the current situation of leather and leather products industry LLPI of Ethiopia.

25 organizations were selected on the above criteria. That is 16 from the tanneries segment, 4 from the leather products segment and 5 from the footwear. The total population of organizations in leather and leather products industry LLPI of Ethiopia are 22 tanneries, 14 leather product manufacturers and 13 footwear companies. These 25 organizations selected represent 73% of the tanneries, 38% of the footwear manufacturers and 29% of the leather product manufacturers of the country. See Annex 1, for list of organizations under the study

### ***DATA ANALYSIS PLAN***

The raw data gathered was processed analyzed and summarized through tabulation, graphs, and charts as needed. This data was compared with literature to reach at conclusion.

#### **1.8 SCOPE AND LIMITATION OF THE STUDY**

This paper focused on the exporting leather industries which are close to the international market. Therefore, the study did not consider small scale industries which are not relevant for the topic under study. Due to time and budget constraints no sample fall out of the cities Addis Ababa, D/Zeit, Nazreth and Modjo. However the cluster of the industries is concentrated only in these cities. Therefore, it is believed that the objectives of this study were met adequately. Organizations where head office is located in Addis Ababa but their manufacturing plants are else where were considered on this study.

The ISO 9001:2000 standard has been upgraded in the end of 2008 to ISO 9001:2008. However, the requirements of these documents are the same. Since, ISO 9001:2000 is in use by most of the local organizations and still valid for certification in this paper ISO 9001:2000 is used for evaluation.

These limitations and challenges were faced on this study:

- In most factories information regarding competitive advantage and process was highly confidential and secured. Thus, lack of access to this information could limit the degree of accuracy and reliability of the conclusion at the end of this research
- Leather Factory members were passive in responding questionnaire timely and completely due to their work load. This was also true for interviews.
- Reference materials and information on previously carried researches on related topics on Ethiopian context was not available.
- Time constraint for detail investigation of certain factual conditions was faced in the study.

## 1.9 STRUCTURE OF THE PAPER

The study covers five chapters. The first chapter deals with introduction and background of the study, statement of the problem, objectives of the study, significance of the study, Justification, research methodology, scope and limitation of the study and structure of the paper. The second chapter focuses on the review of related literature while the third chapter deals with background of leather factories operating in Ethiopia. The fourth chapter deals with data analysis and interpretation. Finally, summary, conclusion and recommendation were presented in the fifth chapter.

## 2. REVIEW OF RELATED LITREATURE

### 2.1 What is Quality Management System?

The extent and complexity of organizational processes has dramatically increased. Hence, companies require tools to manage this complexity. QMS (Quality management system) provides a structure to ensure that various processes are carried out in formal and systematic way. Senn Jemmer, 1987, p60

The international standards Organization ISO defines quality management system as: "The organizational structure, responsibilities, procedures, processes and resources for implementing quality management" ISO8042, 1986 p3

#### ***Benefits***

The Benefits of Implementing a Quality Management System include consistent products and services, established measurable quality criteria, assurance of best practices and continuous improvement, reduced costs of rework, downtime and poor quality, leads to higher customer satisfaction, optimization of resources and objectives as well as achieve competitive advantage in the market.

Drivers for quality Management Systems are: customer expectations, operational performance objectives, regulations, environmental ordinances, product liability act, Standards, and competition objectives like cost pressure, shorter innovation cycles and globalization. Lesely Munro-Faure, 1995 p74;

#### ***The Eight principles of Quality Management***

1. Customer focus
2. Leadership
3. Involvement of people
4. Process approach
5. System approach to management

6. Continual improvement
7. Factual approach to decision making
8. Mutually beneficial supplier relationships

Crucial factors influencing improvement relevant to the customer are called the “six M’s” which are Man, Materials, Methods, Machines and measuring devices, Milieu environment, Money liquidity. These all influence quality as well as costs and they all are given due consideration in quality management system. John Krucithof 1994, p39

### ***Non-conformity prevention***

In quality management the term non conformity refers to a system breakdown such as: breaking the law, delivering nonconforming product to clients. The basic principle in quality management is Nonconformity Prevention = Cost reduction, hence encourage organizations to put in place a system which enables them to prevent non conformities before errors occur or detected.

Example of Cost of non conformities could be accidents, customer Dissatisfaction, machine failure, production down time, rework, product recall, time spent searching for causes of nonconformities, liability, and punishment. Scott Dalgleish, April 1, 2005

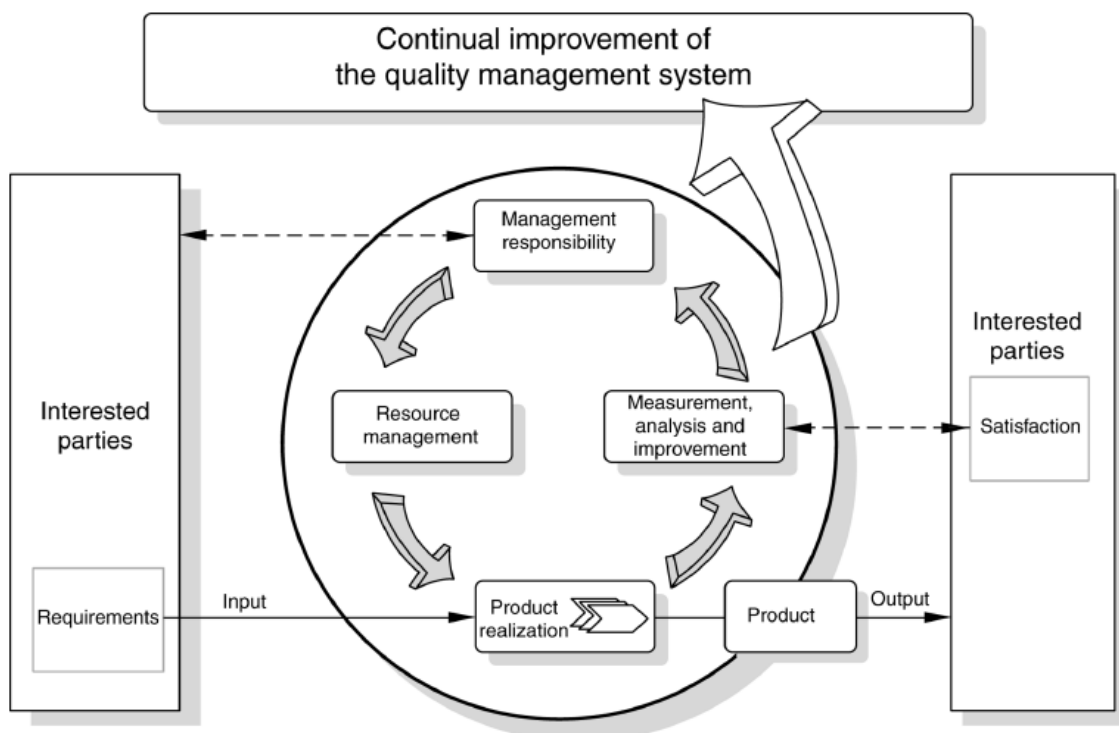
## 2.2 What is ISO 9001?

**ISO 9000** is a family of standards for quality management systems. ISO 9001 is established as a requirement for implementation of a quality management system QMS to be satisfied by organizations to assure the level of management quality is up to an international standard. It provides a benchmarking for organizational performance in terms of management quality. A "product", in ISO vocabulary, means a physical object, or an intangible service. It is applicable to all kinds of organization, whether public, private, for profit or non-governmental regardless of size or type. ISO 9001 is maintained by ISO, the International Organization for Standardization and is administered by accreditation and certification bodies. Jim Wade May-June 2002

### ***Process Approach***

The international standard promotes the adaptation of a process approach when developing, implementing and improving the effectiveness of a quality management system to enhance customer satisfaction by meeting customer requirements. CEN 2000, p2

Figure2.1: Quality Management System Flow Diagram



Source: CEN, 2000, p4

A process describes a sequence of activities and the transformation of inputs. Processes in organizations are classified as central core and support to their nearness to the activities, or objectives the organization has formed. CEN 2000, p2

### ***Some Basic International Standards***

- ISO 9001:2000 Quality management systems requirements
- ISO 9004:2000 Quality management systems - Guidelines for performance improvements.

- ISO 19011 Guidelines for quality and/or environmental management systems auditing
- ISO 14001:2004 Environmental Management Systems
- SA 8000 – Social Accountability John Krucithof & Jeff Ryass 1994, p51,

### *ISO 9001 standard versions*

ISO 9001:2000 combines the three standards 9001, 9002, and 9003 into one, called 9001. The 2000 version sought to make a radical change in thinking by actually placing the concept of process management front and center "Process management" was the monitoring and optimizing of a company's tasks and activities, instead of just inspecting the final product. Jim Wade ,May-June 2002

The ISO 9000 standard is continually being revised by standing technical committees and advisory groups, who receive feedback from those professionals who are implementing the standard. In this view on the year 2008, ISO 9001: 2008 version was introduced. ISO 9001:2008 only introduces clarifications to the existing requirements of ISO 9001:2000 and some changes intended to improve consistency with ISO 14001:2004. There are no new requirements. Due to this fact, this paper is based on the 2000 version of ISO 9001.

### 2.3 ISO 9001:2000 Requirements

To be ISO 9001certified, it is required to document, implement and maintain a management system capable of supporting and demonstrating the consistent achievement of the requirements of the international standard, ISO/9001:2000 and customer focus. Stephanie Clifford, 2003 p67

Some of the requirements in ISO 9001 include:

- a set of procedures that cover all key processes in the business;
- monitoring processes to ensure they are effective;
- keeping adequate records;

- checking output for defects, with appropriate and corrective action where necessary;
- regularly reviewing individual processes and the quality system itself for effectiveness; and
- facilitating continual improvement

## 2.4 Structure of ISO 9001:2000 QMS

ISO 9001:2000 Annex 7.3 is a quality management system requirement document which is available from the international standards organization. This quality management system - requirement contains eight sections or clauses. They are:

- Clause 1 - Scope
- Clause 2 - Normative reference
- Clause 3 - Terms and definitions
- Clause 4 - Quality management system
  - Identify processes, documentation requirements, quality objectives, quality manual, control of documents
- Clause 5 - Management responsibility
  - Management commitment, customer focus, quality policy, planning, management representative, internal communication, management review of input and output.
- Clause 6 - Resource management
  - Competence, provision of resources, infrastructure, work environment, danger analysis
- Clause 7 - Product realization
  - Planning of the realization process, customer-related processes, design and development, purchasing, production and service provision, control of monitoring and measuring devices
- Clause 8 - Measurement, analysis and improvement
  - Monitoring and measurement, control of nonconforming products, data analysis, improvement



## 2.5 Elements of ISO 9001

The ISO regulation identifies the essential elements that a quality system shall embody for design, production and distribution, without prescribing specific ways to establish these elements. These elements include: ISO, 2005, p26

- personnel training and qualification;
- controlling the product design;
- controlling documentation;
- controlling purchasing;
- product identification and traceability at all stages of production;
- controlling and defining production and process;
- defining and controlling inspection, measuring and test equipment;
- validating processes;
- product acceptance;
- controlling nonconforming product;
- instituting corrective and preventive action when errors occur;
- handling, storage, distribution and installation;
- records;
- Quality Audits.

Major emphasis is given on organizational structure, responsibilities, procedures, processes and resources.

## 2.6 ISO 9001 Documentation Requirements Clause 4 of ISO 9001

ISO 9001 views documentation as a medium that supports organizations Quality Management System in terms of providing evidence of implementation and conformity to specified requirements. The following documents must be developed to meet ISO standards:

- documented statements of a quality policy and quality objectives,
- a quality manual,

- Six documented procedures required by this International Standard,
  - Control of Documents clause 4.2.3
  - Control of Records clause 4.2.4
  - Internal Audits clause 8.2.2
  - Control of Nonconforming Product / Service clause 8.3
  - Corrective Action clause 8.5.2
  - Preventive Action clause 8.5.3
- documents needed by the organization to ensure the effective planning, operation and control of its processes, and
- Records required by organization quality management system and this International Standard.

The quality policy is a formal statement from management, closely linked to the business and marketing plan and to customer needs. The quality policy is understood and followed at all levels and by all employees. Each employee needs measurable objectives to work towards.

Manuals, procedures, work instructions and forms or formats are methods to control a process effectively. They promote uniformity and consistency in the way things are done. They also provide a basis for future reference. They can also be used as a training tool in terms of bringing new employees up to speed of the organization's operations.

Records are generated as a result of the implementation of processes. They may exist throughout the quality management system. Records management is a process of ensuring the proper creation, maintenance, use and disposal of records in order to achieve efficient, transparent and accountable management. A sound records management facilitates an efficient flow of information in an accessible, intelligent and usable manner to support the business and accountability requirements of the organization.

## 2.7 Management responsibility Clause 5 of ISO 9001

Management commitment is a requirement in QMS to develop and improve the QMS, to establish quality policy and objectives, to communicate the importance of customer and legal requirements, to conduct management review, to ensure the availability of required resources. It is reflected in decision making and financial arrangements made regarding quality management system implementation e.g. availing resources, allocating time and assigning personnel.

According to ISO 9001 top management shall appoint a member of management with the responsibility and authority of quality management system QMS establishment and maintenance. Performance of the QMS and required improvements shall be reported to top management. Top management should promote the awareness of customer requirements throughout the organization. They also shall establish appropriate communication processes within the organization to ensure communication on the effectiveness of the QMS.

## 2.8 Resource management Clause 6 of ISO 9001

Resource Management in ISO 9001:2000 states that organization shall ensure the availability of resources necessary including infrastructure and work environment to support the operation and monitoring of QMS processes. The organization shall determine and provide the resources needed to: implement and maintain the QM system and continually improve its effectiveness and appeal to the customer satisfaction and increase it.

Personnel performing work affecting product quality shall be competent on the basis of appropriate education, training, skills and experience. Under Competence, awareness and training issues like determining competences and training needs, providing trainings according to needs, establishing the effectiveness of trainings are covered. Significance and importance of activities must be made clear to the employees and appropriate records must be maintained.

## 2.9 Certification

ISO does not itself certify organizations. Many countries have formed accreditation bodies to authorize certification bodies, which audit organizations applying for ISO 9001 compliance certification. Both the accreditation bodies and the certification bodies charge fees for their services. The various accreditation bodies have mutual agreements with each other to ensure that certificates issued by one of the Accredited Certification Bodies CB are accepted worldwide . Charles . Mills ,1989,p74

The applying organization is assessed based on an extensive sample of its sites, functions, products, services and processes; a list of problems "action requests" or "non-compliances" is made known to the management. If there are no major problems on this list, or after it receives a satisfactory improvement plan from the management showing how any problems will be resolved, the certification body will issue an ISO 9001 certificate for each geographical site it has visited. Charles . Mills ,1989,p76

An ISO certificate is not a once-and-for-all award, but must be renewed at regular intervals recommended by the certification body, usually around three years. In contrast to the Capability Maturity Model there are no grades of competence within ISO 9001. Charles . Mills ,1989,p76

## 2.10 Some benefits of ISO 9001:2000 Certification:

- Business and operational efficiency and effectiveness
- Greater consistency of products and services
- Improve customer and stakeholder satisfaction
- Access to new markets
- Better management control and reporting
- Demonstrating improved transparency
- Reducing incidents that result in liability
- Manage the social, environmental and financial risks
- Reduce costs and increase profit

- Protect the brand and reputation of a company
- Assist to achieve continual improvement and business sustainability.

pyzdek, T ,2003, p129

### 2.11 Auditing

Two types of auditing are required to become registered to the standard: auditing by an external certification body external audit and audits by internal staff trained for this process internal audits. Internal audit aim is a continual process of review and assessment, to verify that the system is working as it's supposed to, find out where it can improve and to correct or prevent problems identified. Naveh. E., Marcus, 2004, p87

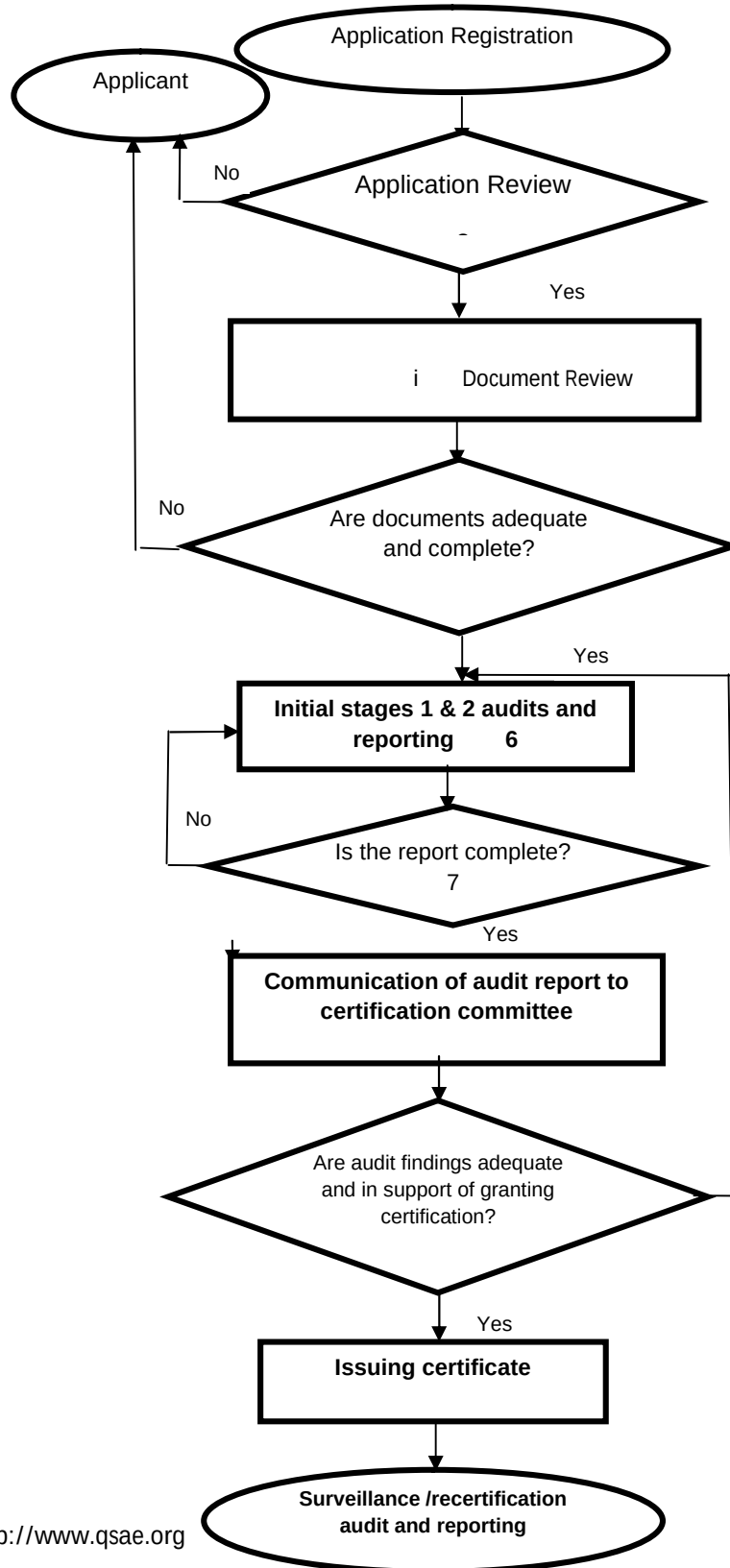
The external audit aims at evaluating and asserting organizations fulfill the desired standards of quality management system. External audit includes third party audit i.e. evaluation of system by consultants or other external body, and certification audit by accredited certification body. The certification audit includes desktop audit for documentation review per the ISO standard, field visit and after certification surveillance audits. Scott Dalgleish, April 1, 2005, p62

### 2.12 QSAE-Cert Internationally Accredited Certification Body for ISO 9001 in Ethiopia

Management System certification is among the services of QSAE Quality and standard Authority of Ethiopia that has been internationally accredited in the end of 2008 E.C. Currently, the Certification Body has commenced to provide a third party accredited Quality Management System Certification Service that is based on ISO 9001:2000 International standard. It has already established pool of Quality Management System Lead auditors, auditors and technical experts.

The QSAE Cert now has launched an Accredited Quality Management System Certification Service which is based on ISO 9001 standard to all local applicant companies in the scope of: agriculture and fishing, food products, beverages and tobacco, textiles and textile products, *leather and leather products*, chemicals, chemical products and fibers, rubber and plastic products, concrete, cement, Lime, and plaster, etc. construction and, education. <http://www.qsae.org>

Figure2.2: QSAE CERT's Certification Process



Source-<http://www.qsae.org>

The Quality and Standards Authority of Ethiopia QSAE is empowered to establish and operate a national conformity assessment system under article 6 sub article 6 of the Quality and Standards Authority of Ethiopia Establishment Proclamation No. 102/1998

It is claimed that the fact that QSAE CERT has obtained International Accreditation would certainly help certified companies to have easy access to and meaningful market share in the international market in order to sell their products and services.

*"In moving the claim "Made in Ethiopia" towards an internationally recognized sign of quality, Ethiopian producers must ensure that their systems are of high quality. Becoming certified in ISO 9001 standards is one such way to demonstrate this. Recognizing this as a major obstruction to the path of certification, the Engineering Capacity Building Program ecbbp worked with QSAE and the international accreditation body, TGA, in order to accredit a new body within QSAE: QSAE-Cert. With QSAE-Cert now able to certify companies in this prestigious category, Ethiopian companies can save money and time in attaining ISO 9001 certifications." QSAE, Jan. 2008, P3*

### 2.13 From traditional to quality management system

One key factor that differentiates quality management system QMS from business process reengineering BPR) is its evolutionary approach in change of management system. Hammer defines BPR as "... the fundamental rethinking and radical design of business processes to achieve dramatic improvement in critical, contemporary measures of performance, such as cost, quality, service and speed" Michael Hammer, 1990, p84.

This clean sheet approach abolishes organizations old way of doing things and start from scratch as a result ignoring their experience, existing processes and documentation. This is a great loss in learning curve, good will, organization culture; and evolved operational efficiency, effectiveness and economy. However, quality management system embraces the experience, existing way of doing things and

documentation where by restructuring and formalizing makes transition smooth and keep the growth of the organization learning curve. C.W. Russ Ruso, 1998, p84

Even there is no hard and dry steps established to convert the traditional management system from to ISO certifiable quality management system, the following steps developed by ISO professionals could be used as a check list for our reference.

- Understand ISO 9001 standard and draft the QMS manual and related procedures and formats.
- Get top management commitment by briefing the requirements and benefits of establishing a quality management system
- Appoint your Management Representative
- Appoint your Quality Representatives
- Establish the QMS Committee, communicate about establishing QMS with employee
- Define your Organization Chart
- Include your employees' Job Descriptions into the QMS records to support the Organization Chart and fill out Employee Competency Record
- Finalize the Quality Policy
- Establish measurable quality objectives to every quality process in the quality management system
- Implement the Control of Documents procedure
- Implement the Control of Records procedure
- Include your enterprise resource planning records into the QMS
- Include your infrastructure planning and maintenance records into the QMS
- Complete the Product Quality Plan
- Finalize the Control of Nonconforming Product procedure as per your product requirements
- Include your product realization records into the QMS
- Complete the supplier-related formats



- Fill out the Data Analysis Register
- Conduct your QMS awareness programs for all employees
- Conduct internal quality auditing training for your internal auditors
- When you think you are ready, implement the QMS as per the QMS Manual specifications
- After 3-6 months, implement the Internal Audit procedure
- Implement the Corrective Action procedure
- Implement the Preventive Action procedure
- Get the QMS Committee and the Quality Improvement Teams to conduct the Analysis of Data process and come up with improvement plans, if any
- Conduct the management review of the QMS
- Ensure the QMS Committee and the Quality Improvement Teams are actively participating in the QMS process and keep all meeting records.
- Conduct 3<sup>rd</sup> party audit and certification audit.

Source - <http://www.iso.org/>

#### 2.14 Importance of ISO 9000

The debate on the effectiveness of ISO 9000 commonly centers on the following questions:

Are the quality principles in ISO 9001:2000 of value?

1. Does it help to implement an ISO 9001:2000 compliant quality management system?
2. Does it help to obtain ISO 9001:2000 certifications?

#### ***Advantages***

It is widely acknowledged that proper quality management improves business, often having a positive effect on investment, market share, sales growth, sales margins, competitive advantage, and avoidance of litigation. Jim Wade, 2002, p13 The quality principles in ISO 9000:2000 are also sound, according to Barnes, Frank Barnes, 2000,

p67 who says "ISO 9000 guidelines provide a comprehensive model for quality management systems that can make any company competitive." Barnes also cites a survey by Lloyd's Register Quality Assurance which indicated that ISO 9000 increased net profit, and another by Deloitte-Touché which reported that the costs of registration were recovered in three years. According to the Providence Business News, Providence Business News, August 2000 implementing ISO often gives the following advantages: 1, create a more efficient, effective operation 2, increase customer satisfaction and retention 3, reduce audits 4, enhance marketing 5, improve employee motivation, awareness, and morale 6, promote international trade 6, increases profit.

However, a broad statistical study of 800 Spanish companies found that ISO 9000 registration in itself creates little improvement because companies interested in it have usually already made some type of commitment to quality management and were performing just as well before registration. Scott Dalglish Quality Magazine April, 2005.

### *Arguments*

A common criticism of ISO 9001 is the amount of money, time and paperwork required for registration. Another problem reported is the competition among the numerous certifying bodies, leading to a softer approach to the defects noticed in the operation of the Quality System of a firm.

Wade argues that ISO 9000 is effective as a guideline than promoting it as a standard

"it mislead companies into thinking that certification means better quality ... [undermining] the need for an organization to set its own quality standards." Jim Wade, 2002, p 257

"Good business judgment is needed to determine its proper role for a company... Is certification itself important to the marketing plans of the company? If not, do not rush to certification... Even without certification, companies should utilize the ISO 9000 model as a benchmark to assess the adequacy of its quality programs." Barnes, 2000 , p53

### 3. ETHIOPIAN LEATHER SECTOR OVERVIEW

With an abundance of livestock resources, Ethiopia has a comparative advantage in producing leather and leather products. The largest number of livestock in Africa and the tenth largest in the world are found in Ethiopia with at least 40 million people owning livestock. According to the livestock marketing authority figures, Ethiopia had approximately 35 million cattle, 25 million sheep, and 19 million goats. The Ethiopian ministry of agriculture estimates that the current skin removal rate take is 7 percent for cattle, 33 percent for sheep, and 37 percent for goats. On average, Ethiopia has the capacity to supply 16 to 18 million pieces of hides and skins to local tanneries. Kiruthu 2008,p 3.

#### 3.1 Leather and leather products industry LLPI

Ethiopia has two big advantages in the leather sector: abundant raw materials and cheap labor. Ethiopia has the largest livestock production in Africa, and the 10th largest in the world. Annually it produces 2.7 million hides, 8.1 million sheepskins and 7.5 million goatskins. This comparative advantage is further underlined by the fact that the cost of raw hides and skins constitute on average between 55 to 60% of the production of semi-processed leather Kiruthu 2008 , p5.

The leather and leather products industry LLPI in Ethiopia has reached a relatively high stage of development and now enjoys a reputation as a producer of good quality leather, recognized in international markets.

| No | Cattle    |         | Sheep & Lambs |             |         |   | Goats      |         |
|----|-----------|---------|---------------|-------------|---------|---|------------|---------|
| 1  | India     | 312,572 | 1             | China       | 131,095 | 1 | China      | 148,400 |
| 2  | Brazil    | 168,000 | 2             | Australia   | 115,693 | 2 | India      | 123,000 |
| 3  | China     | 127,148 | 3             | India       | 57,900  | 3 | Pakistan   | 47,400  |
| 4  | USA       | 98,049  | 4             | Iran        | 55,000  | 4 | Sudan      | 37,800  |
| 5  | Argentina | 55,000  | 5             | New Zealand | 45,800  | 5 | Bangladesh | 33,800  |

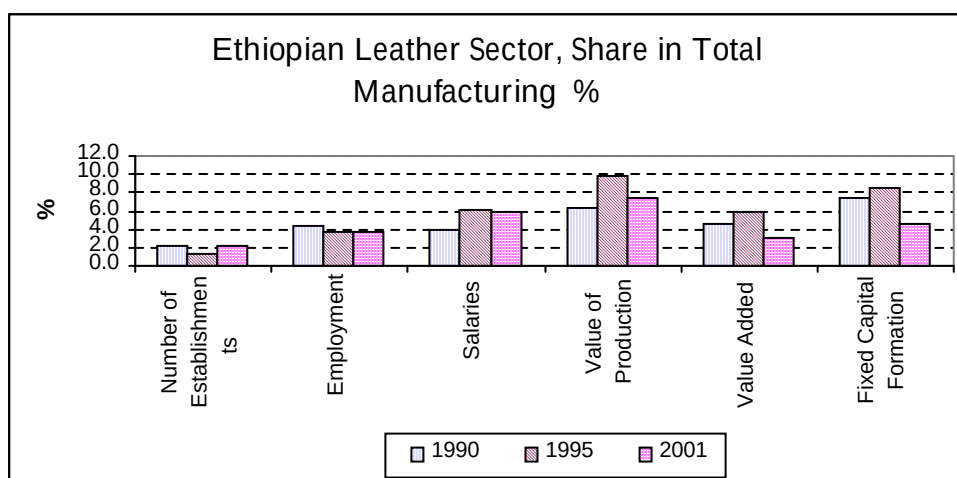
|   |          |        |    |              |        |   |          |        |
|---|----------|--------|----|--------------|--------|---|----------|--------|
| 6 | Pakistan | 47,700 | 6  | Sudan        | 42,800 | 6 | Iran     | 26,000 |
| 7 | Ethiopia | 40,877 | 7  | UK           | 42,261 | 7 | Nigeria  | 24,300 |
| 8 | Sudan    | 37,093 | 8  | Turkey       | 29,435 | 8 | Ethiopia | 23,413 |
|   |          |        | 9  | Ethiopia     | 25,497 |   |          |        |
|   |          |        | 10 | South Africa | 28,700 |   |          |        |
|   |          |        | 11 | Pakistan     | 24,100 |   |          |        |

**Table 3.1 Ethiopia's position among the world top countries endowed with livestock - 2001 – Thousand heads**

Source: FAO World Statistical Compendium for Raw Hides and Skins, Leather and Leather Footwear, 2001 adjusted with information received from MoTI in January 2005 based on the Summary of the Livestock Statistics from the 2004 Annual Agricultural Sample Survey and 2003 Pastoral areas Livestock Enumeration, Central Authority of Ethiopia.

The LLPI is responsible for 9.7% of the foreign exchange obtained in 2003-2004. There are 800 registered H&S traders, and 6000 tannery and leather goods factory employees. The LLPI contributes between 7% and 10% to the total value of manufactures, 6% of the total salaries and value added and almost 4% of employment. Figure 3.1 presents the Share in Total Manufacturing in % of the Leather Sector.

**Figure 3.1 Ethiopian Leather Sector, Share in Total Manufacturing %**



Source: UNIDO Industrial Statistics 2003, based on data by the Ethiopian Central Statistics Authority

### 3.2 Products

The leather industry in Ethiopia produces hides, pickled sheep skins, wet-blue goat skins, crust and finished leather, and leather products footwear, garments, gloves, bags, wallets, travel goods, etc.

“Sheep and goats skins represent the bulk of Ethiopian leather production. Ethiopian highland sheepskins cabretta, in particular retain a high reputation in international markets for some natural characteristics of clarity, thickness, flexibility, strength and compact texture which make them especially suitable for high quality gloves, sports equipment and garments. The goatskins, classified as Bati-genuine the international name given for high quality goat skins and Bati type, are thick, highly flexible and have a clean inner surface.” Berhanu and Kibre, 2002,p17.

| Raw Material | Population thousand heads | Share in total population % | Raw Leather Production Million pieces | Off-Take Ratio |
|--------------|---------------------------|-----------------------------|---------------------------------------|----------------|
| Cattle       | 40,800                    | 45.9%                       | 2,7                                   | 6.6%           |
| Sheep        | 25,000                    | 28.1%                       | 8,1                                   | 32.4%          |
| Goats        | 23,000                    | 25.9%                       | 7,5                                   | 32.6%          |

Table 3.2 Leather off-take ratio

Source: FAO World Statistical Compendium for Raw Hides and Skins, Leather and Leather Footwear, 2001 adjusted with information received from MoTI in January 2005 based on the Summary of the Livestock Statistics from the 2004 Annual Agricultural Sample Survey and 2003 Pastoral areas Livestock Enumeration, Central Authority of Ethiopia.

In spite of the high livestock endowment, the availability of hides and skins to be processed into leather is low in Ethiopia, due to low off-take ratios a dominant factor among other factors.

### 3.3 MARKET

During the past two decades leather and semi-processed hides and skins have constituted the second major export product of the country with between 10 and 20 %

of total foreign earnings, second only to coffee with between 50 and 60% of earnings apart from the late 1990's when it was just under 10%. But in terms of manufactured products, the leather sector still ranks first. In 2008, the sector exported \$91 million primarily to Europe, Asia, and the Middle East. Hides and skins make up the majority of these exports, accounting for over 99 percent of leather exports. Finished leather products are primarily sold on the domestic market.

|                                                                                                                                                                                                                                                                                                                                                                                                        | ITEMS              | 1995 Ethiopian Calendar<br>2002/2003 |             | 1996 Ethiopian Calendar<br>2003/2004 |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------|-------------|--------------------------------------|-------------|
|                                                                                                                                                                                                                                                                                                                                                                                                        |                    | Qty                                  | ETB         | Qty                                  | ETB         |
| 1                                                                                                                                                                                                                                                                                                                                                                                                      | Pickled sheepskin  | 460073                               | 302,035,335 | 535821                               | 303,393,365 |
| 2                                                                                                                                                                                                                                                                                                                                                                                                      | Crust sheepskin    | 749943                               | 12,006,599  | 1203027                              | 19,345,097  |
| 3                                                                                                                                                                                                                                                                                                                                                                                                      | Finished sheepskin | 1737411                              | 27,409,295  | 2889948                              | 40,021,701  |
| 4                                                                                                                                                                                                                                                                                                                                                                                                      | Wet Blue goatskin  | 367762                               | 113,254,120 | 292877                               | 88,573,218  |
| 5                                                                                                                                                                                                                                                                                                                                                                                                      | Crust goatskin     | 280095                               | 10,508,604  | 142500                               | 8,304,927   |
| 6                                                                                                                                                                                                                                                                                                                                                                                                      | Finished goatskin  | 150000                               | 810,847     | 100000                               | 518,094     |
| 7                                                                                                                                                                                                                                                                                                                                                                                                      | Wet blue hides     | 733462                               | 33,791,382  | 940424                               | 40,132,180  |
| 8                                                                                                                                                                                                                                                                                                                                                                                                      | Crust hides        | 715324                               | 2,925,483   | 365000                               | 2,397,554   |
| 9                                                                                                                                                                                                                                                                                                                                                                                                      | Finished hides     | 145555                               | 1,240,811   | -                                    | -           |
| Total                                                                                                                                                                                                                                                                                                                                                                                                  |                    |                                      | 503,982,476 |                                      | 502,686,136 |
| US\$                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                      | 58,602,120  |                                      | 58,451,875  |
| <b>Note:</b> 1 Quantity: Pickled sheep skin and wet blue goat skin, Crust goat skin are expressed in dozens; crust and finished sheep skin, finished goatskin, crust and finished hides are expressed in square feet, Wet blue hides in Sides 2. According to ETFLGMA, during the budget years, Addis Ababa Tannery in 1995, Ethiopian Calendar, Ethiopia Tannery and ELICO Exported finished leather. |                    |                                      |             |                                      |             |

**Table 3.3 Export of Semi and Processed Hides and Skins**

*Source: ETFLGMA and MoTI, October 2004*

The importance of Ethiopian exports relative to other African countries can be indicated by the share Ethiopia contributes to total African skin exports: 51% in the case of

sheep and 30% in the case of goats. Exported products go in particular to the UK, Italy and, increasingly, China; in 2000 these countries took up 27% and 26% respectively Kodama 2001 and Muchie 2007 .

The market for leather products is mainly international and not domestic. Semi processed leather products are exported to markets in the Europe Union, the USA, Canada, Japan and the Far East. There is also export to countries in Africa, in particular to Nigeria and Uganda, as well as to the near East, i.e. Yemen. The majority of Ethiopia's leather exports leave the country in semi-processed form except a minor share of footwear market in the COMESA, the Common Market for East & Southern Africa.

### ***Market Profile***

***The European Union EU)*** is a major importer of Ethiopian leather products. The EU market is large and diversified and competition is strong because many exporting countries are active or wish to enter this market. It is also very saturated, thus the only way to enter the market is by displacing competitors. The EU market is also sensitive to regulations and standards like, environment, safety and quality.

Ethiopia falls within the AGOA Africa Growth Opportunity Act with ***USA***. This allows conventional leather and safety shoes to enter USA at 0% duty. For other countries the duties range from 8.5% to 37.5%.

The trade agreement Ethiopia has with ***COMESA***, the Common Market for East & Southern Africa, represents a further export opportunity. Ethiopia borders in the south on a large trading block - East Africa - Kenya, Tanzania and Uganda. These three countries trade freely between themselves and are moving towards monetary and market union.

## **3.4 Constraints for development**

According to an industry survey conducted by the Ethiopian export promotion agency, leather-producing firms report that they are operating from 30 to 90 percent below

capacity. The industry faces constraints due to outmoded equipment and machinery; lack of market information; low quality standards; and limited supply of raw materials. Firms in the leather sector cite the need to invest in technology upgrades and human skills development as crucial to improving productive capacity. Lack of market awareness and quality standards were seen as impediments to Increasing exports.

Berhanu and Kibre 2002) have made an interesting study of competitiveness in the Ethiopian leather sector. For the tanning sector, they have concluded that the main factors affecting competitiveness are:

1. low capacity utilization;
2. poor infrastructure: inefficient infrastructure and inefficient bureaucratic structures combined significantly raises the transaction costs of firms, making it difficult to compete nationally or internationally;
3. the technology employed is not updated regularly, in particular the lack of learning in production management;
4. the lack of hard currency to purchase spare parts and inputs;
5. the relative lack of export support and/or promotion services

For the leather footwear firms, the main factors affecting competitiveness are the poor quality of domestic leather, and the high cost of imported inputs. They conclude that resource endowment is not enough for competitiveness, and that, similarly, the availability of cheap and abundant labor by itself does not seem to be sufficient to compete internationally. It is to be noted here most of the constraints like quality, infrastructure, and capacity utilization are well addressed in quality management system.

Ethiopian leather companies face various requirements from international markets different than local ones – they have bigger orders, higher demands on quality, and they have a very tight time schedule. Ethiopian companies have to learn to deal with these requirements including Quality management system certification.



### 3.5 Strategies

The government created the engineering capacity building program ecgp to boost industrial development in Ethiopia and has chosen the leather sector as one key sector. Major objectives set for leather and leather products industry LLPI in Ethiopia include i ability to access regional and global markets; ii potential for value addition, job creation and income generation; iii potential to attract domestic and foreign investment.

The strategy proposed by the Government of Ethiopia would take as a model the policy mix, experimented with in China and Italy for the footwear industry according to a “Top-down Pull” Approach TDA. This approach requires that the development of footwear should “pull” the tanning sector to produce more, better quality finished leather; resulting in turn in an increase in the demand from the tanners for more, better quality hides and skins.

In this context, this five-year LLPI Development Programme is directed to the extensive development of the footwear industry as priority sub-sector see table 3.4 .

| Year      | Footwear    | Leather Garments | Leather Goods | Total Million in US Dollars |
|-----------|-------------|------------------|---------------|-----------------------------|
| 2005/2006 | 0           | 7,010,000        | 721,875       | 7,310,875                   |
| 2006/2007 | 15,996,000  | 12,110,000       | 1,443,750     | 29,549,750                  |
| 2007/2008 | 50,052,000  | 16,130,000       | 3,850,000     | 70,032,000                  |
| 2008/2009 | 94,760,000  | 24,000,000       | 5,390,300     | 124,150,300                 |
| 2009/2010 | 177,000,000 | 35,000,000       | 8,000,000     | 220,000,000                 |

Table 3.4 Export Targets by Years

ecgp to achieve the objectives and designed strategy has implemented management tools of business process reengineering BPR and quality management system QMS in the leather value chain to boost the performance of the sector besides technical assistance.

### 3.6 Quality Management System in the LLPI

As the competition for market share is becoming fierce for companies, they need to develop different strategies to stay in business and win customers. To compete successfully in the

global market, the leather industry must meet customer requirements and expectations as well as continually improve its internal efficiency.

The 2007 export income was just over \$90m from the LLPI, growing most by expansion of volume and some increased processing with consideration to quality of products. However, especially for European countries like Italy and Britain ISO certification becomes crucial. Therefore to keep the increasing rate of export from the sector certifying organizations in the leather sector is critical. Besides, quality management system addresses most of the constraints mentioned in section 3.4.

### 3.7 ASSISTANCE

#### *ISO Certification*

The Quality and Standards Authority of Ethiopia – Cert QSAE -Cert with ISO 9001 accreditation can now certify Ethiopian companies for ISO 9001 certification. Hence, organizations in the leather industry, which create new jobs, generate higher income, and boost economic development will get certified without spending large sums of money to bring in international consultants and assessors, not to mention be flexible to their tight time schedules.

#### *Sector support*

Starting from the strategical positioning and planning of the leather industry up to provision of services required for industrial development in areas like production, market, quality and competitiveness the engineering capacity building program ecbp) , the Ministry of Trade and Industry MoTI, the Ministry of Agriculture and Rural Development MoARD, the Ethiopian Investment Commission EIC, with partner organizations like the German Technical Cooperation's gtz, United Nations Industrial Development Organization UNIDO are involved

#### *Associations*

To coordinate their effort the organizations and professionals under the leather industry has formed The Ethiopian Tanners, Footwear, Leather Goods Manufacturers Association ETFLGMA , Ethiopian Leather Industries Association ELIA

### ***Training Centers***

To support the development of the sector by providing training in technical, managerial and marketing areas, direct services to industry as well as by promoting networking between the formal and the informal sector, The Leather and Leather Products Technology Institute LLPTI, the Science and Technology Commission STC, which is playing a passive role at the present time, the Ethiopian Cleaner Production Centre ECPC, established by UNIDO , Productivity Improvement Center PIC are there.

### ***Export Promotion***

The Ethiopian Export Promotion Agency EEPA is a Government institution with the objective of promoting the country's exports

## **3.8 Segments of the Ethiopian LLPI**

There are three major industrial components segments of the system: the tanneries producing the leather, the footwear manufacturers and the leather products manufacturers. There are large and medium size plants in the formal sector and micro enterprises operating in the informal sector of the economy, particularly in footwear manufacturing.

### **I. Tanneries**

The tanneries segment produces majorly semi processed leather for the export market pickled from sheep skin, wet blue and crust. There are 22 tanneries in operation, in Ethiopia. 10 tanners produce finished leather and 14 have facilities for the treatment of effluents. Appendix 2, List of tanneries with their relative capacity)

The processing capacity of the tanneries far exceeds the supply of hides and skins, particularly raw sheep and goatskins. This has created an unhealthy competition among tanners, with the result that skin prices are high. This raises the price of leather to the local manufacturers of leather products and affects the capacity to compete in the export market.

## **II. The Footwear Sector**

The footwear industry produces gentlemen, ladies and children shoes. It is segmented into mechanized and small and medium scale producers.

### ***Mechanized Industries***

A list of 12 mechanized footwear factories includes the most important medium-large producers, in the formal sector. One of these factories Wabe had reverted to producing only PVC injection-molded footwear, Tikure Abbay produces military and industrial footwear and Gamb is export oriented Appendix 3, List of mechanized footwear companies with their relative capacity, Appendix 4, profile of small and medium scale producers

## **III. The Leather Products / Garments Sector**

This sector mainly produces clothes and accessories like coats jackets, skirts, trousers, vests, belt, upholstery... There are 14 major leather products manufacturers

As shown in the table below, the current factory outputs of the Leather Garments sector ranges from 10 – 60 garments per day whilst the installed capacities range between 20 – 150 pieces per day. This is principally due to; i the size and static state of the domestic market as well as ii a negligible penetration of the export market. Appendix 5, major producers of leather garments)

### ***Other Leather Products***

There is little or no tradition of leather goods production and the volume of manufactures are not significant. Nevertheless, the domestic market has begun to develop over the last decades as shown by the opening of elegant shops in the five-star hotels. This has increased the demand for leather goods but this exceeds local manufacturing capacity and leather goods are also imported. Attempts have made by some leather garment manufacturers to produce leather goods using waste trimmings from leather garment manufacture. This was unsuccessful. Appendix 6, major producers of leather goods)

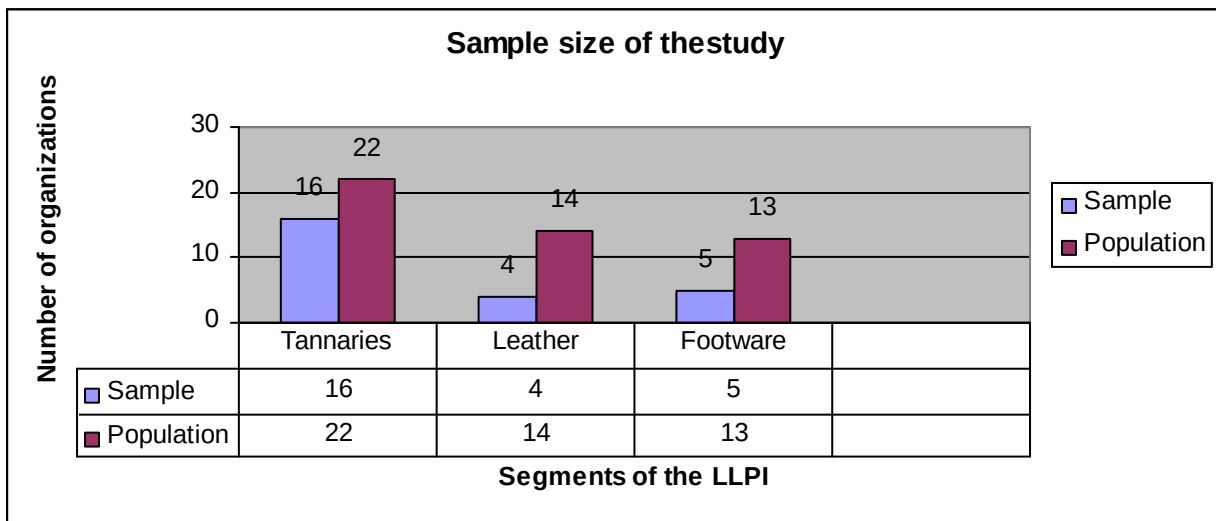
## 4. DATA ANALYSIS AND INTERPRETATION

### 4.1 DATA PRESENTATION

The analysis is based on both primary data and secondary data. The primary data is collected through questionnaires and interviews from members of administrative and operational management. The secondary data includes internally generated documents by the organizations like organization profile, quality manuals, reports as well as external sources such as information from the internet, feasibility studies, the ISO 9001:2000 standard, books, periodicals, brochures, and other similar materials.

As shown below in figure 4.1. the 25 organizations selected on convenience base, represent 73% of the tanneries, 38% of the footwear manufacturers and 29% of the leather product manufacturers.

Figure 4.1 Sample size of the study from the population



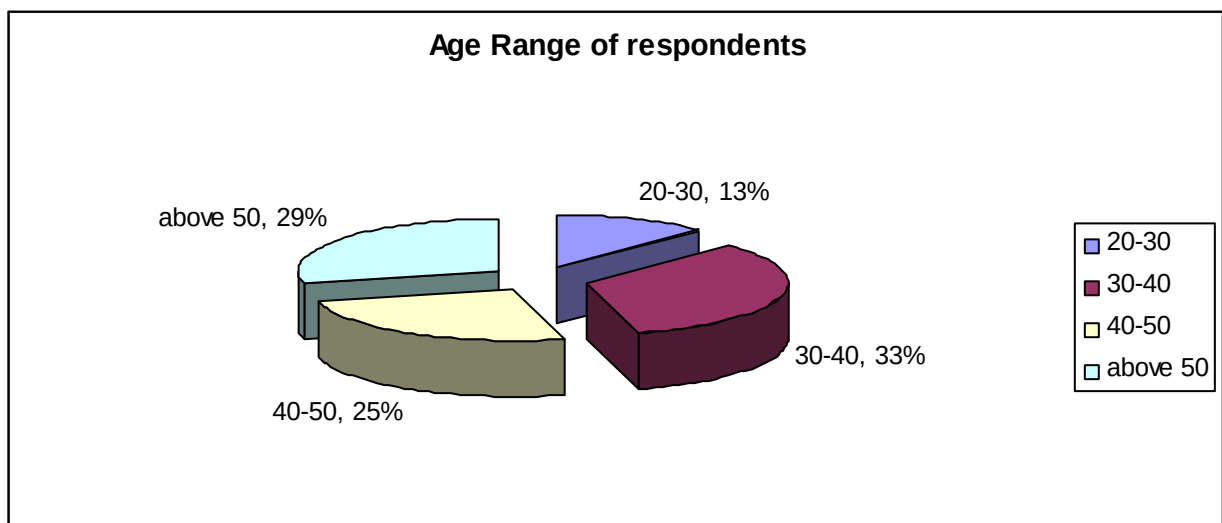
The questionnaires were distributed to 25 organizations in the leather and leather products industry LLPI in Ethiopia . Except one questionnaire in the tanneries all the respondents have returned the questionnaire i.e. 96% response rate). Personnel from all the organizations under study including the operation manager in the questionnaire non respondent tannery were interviewed. Hence; it is believed that the study result could be conclusive of all sampled organizations.

## 4.2 Overview OF RESPONDANTS

Questionnaire has been used to assess the importance of quality management system to the leather sector, the different aspects of QMS element available, challenges faced on implementation of ISO 9001:2000 and available support from various bodies. Simultaneous with the questionnaire interviews has been conducted with the various organization employees in the sample and support giving bodies. The summary of the age group, work experience and education background of the questionnaire respondents is presented below.

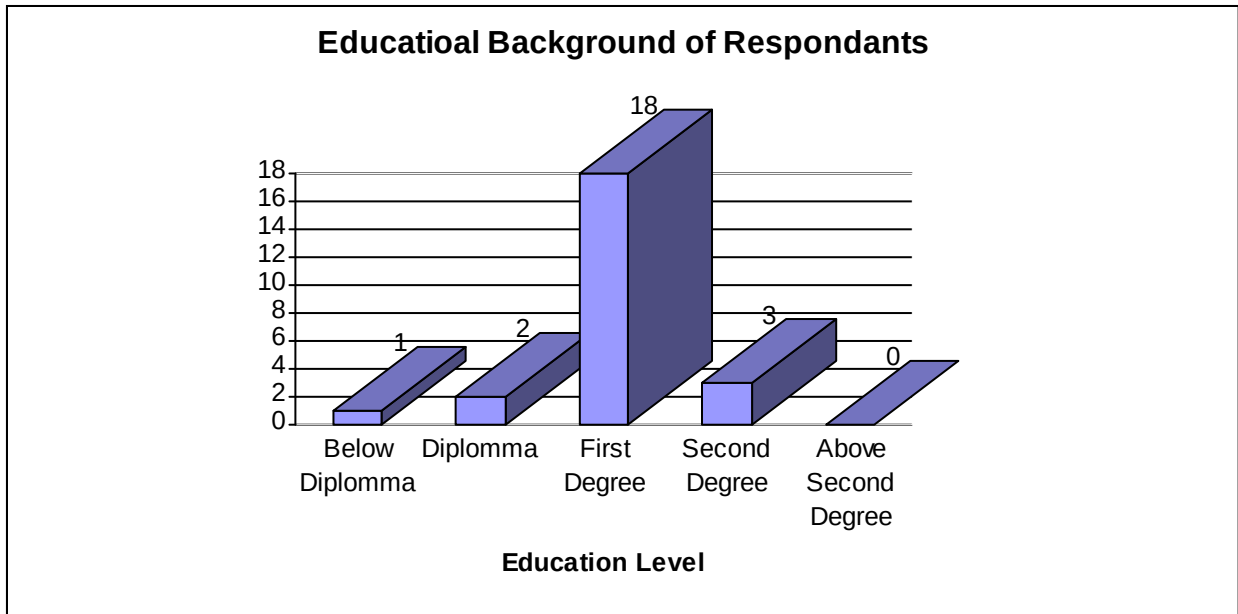
Most of the respondents are above the age of 30 and work experience ranging from 2 years to 34 year of work experience.

Figure 4.2 Age Range of the respondents



Tannery management respondents show an experience in the sector above 15 years. This could be due to the fact that this semi processing and exporting sector has been active for more than fifty years and unlike footwear organizations which meagerly used to produce shoes for military and local market experienced more stable change in management and payment.

Figure 4.3 Education backgrounds of respondents

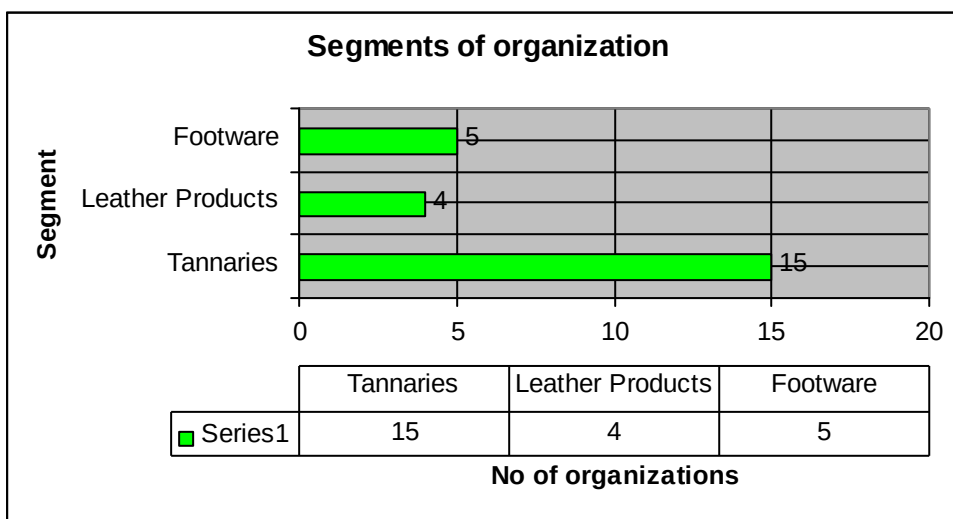


Most of the respondents have the education level of first degree in various fields. Most of the respondents are also operation managers and factory managers which held technical and managerial positions in their organizations. This could be a good indicator for ISO 9001 implementation because their level of education with their position in their organizations is satisfactory for creating awareness, fulfill the various production and management requirements set by the standard

### 4.3 ORGANIZATIONS

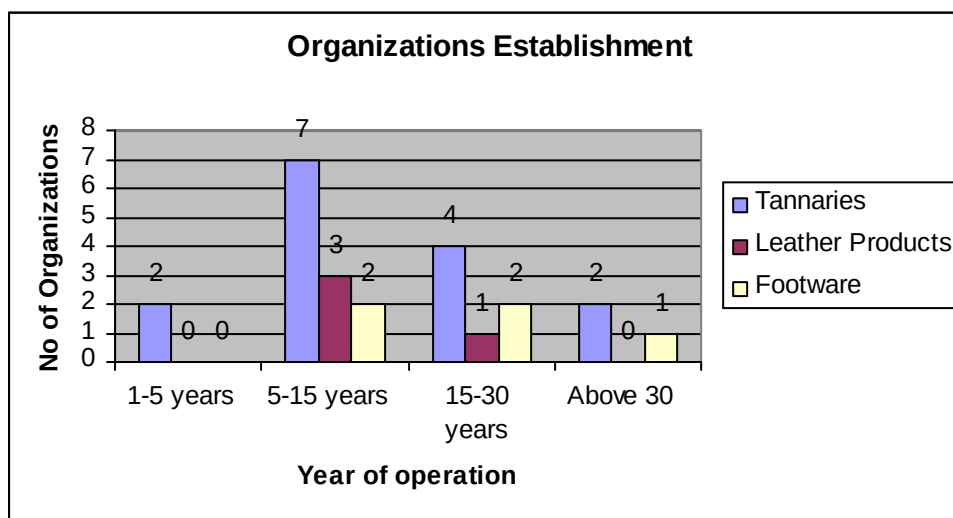
The major export income generated and semi processing activities are conducted in the tanneries. Due to this fact 63% of the data collected in this study is from tanneries. Footwear and leather product industries even though not a most important income generators for the Ethiopian leather and leather products industry are strategical units in the top down approach in the development of the industry. Hence, in this study 21 % weight for the footwear industry and 17% for the leather product industry is given.

Figure 4.4 Segments of respondent Organizations



Except three organizations which have an operational age of forty to sixty years, the majority of the organizations have the age from five to thirty years. In the sample the organizations which are established in the recent five years are tanneries. Hence, it can be seen from the data that the tanneries have been in operation for a long period of time and more new ones are being established. From this we could conclude that this segment is an active sub sector in the leather industry due to possible reasons such as export market and availability of raw materials and cheap labor.

Figure 4.5 Organizations period of operation





From the responses it could be summarized that all tanneries produce and export semi processed hides and skins h&s i.e. pickled from sheep skin and wet blue from goats skin. From the respondent sixteen tanneries only seven process and export crust and other finished leather products like leather for shoe upper and garment. The four leather product manufacturers produce men's and women's Jackets and Coats, trousers, lady skirts, vest, large & small leather goods, Belts, upholstery, wallet, and field jackets. The five footwear companies produce gentlemen's shoes. Ladies shoes, children's shoes, shoe upper, last, sport shoes, sandals and boots. From the footwear companies in the sample Tikur Abay Shoe S/C besides civilian shoes, produce military boots and durable shoes for industrial purpose.

#### 4.4 IMPORTANCE OF ISO 9001 CERTEFICATION

From the organizations under study only two tanneries has been certified for ISO 9001:2000. These companies are Ethio-Leather Industry PLC ELICO and Ethiopia Tannery S/C. According to information from the Ethiopian Leather Industries Association ELIA these two companies are the only two in the industry with ISO certification so far. These companies are not only ISO certified in the area of quality management ISO 9001:2000 but also ISO 14001:2004 Environmental Management Systems.

| <b>Segment Of LLPI</b> | <b>Certified ISO 9001</b> | <b>Uncertified ISO 9001</b> | <b>TOTAL</b> | <b>% of certified organizations</b> |
|------------------------|---------------------------|-----------------------------|--------------|-------------------------------------|
| Tanneries              | 2                         | 14                          | 16           | <b>13%</b>                          |
| Leather Products       | 0                         | 4                           | 4            | <b>0%</b>                           |
| Footwear               | 0                         | 5                           | 5            | <b>0%</b>                           |
| <b>Total</b>           | <b>2</b>                  | <b>23</b>                   | <b>25</b>    | <b>8%</b>                           |

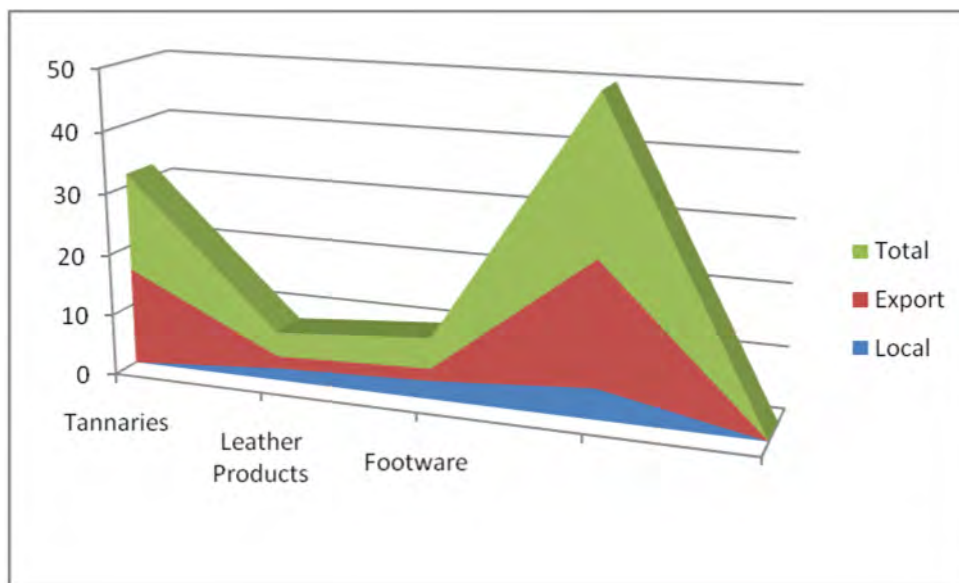
Table 4.1 Certified organizations for ISO 9001:2000

According to the interviews with these two companies' management members the reason for certification was due to long term customers requirement from the European Union market. Hence, it could be said that the main reason for ISO certification for the certified companies is

demand driven. Major advantages gained from certification according to respondents are improved customer satisfaction, maintenance of international customers and access to new markets. Therefore, it could be concluded that the key reason and advantage for certification for the certified companies is customer and market oriented which is crucial for the profitability and growth of the organizations.

However, the benefits gained from the certification according to the respondents of these two companies include increased efficiency, effectiveness and economy of internal management and processes. Other internal advantages gained from the certification according to the respondents is better work environment, reduced cost, continuous improvement, greater consistency in production and products, better documentation, available information for easy and prompt decisions.

Figure 4.6 Market locations for the segments



According to the respondents all of the most important customers for the tanneries are located in the export market but for the leather product and footwear segment the export market covers 50% and 40% of their total market. From this data it could be seen that the main income is generated from the international market hence international standards and requirements like ISO certification could be a factor in the marketing of their products.

A major competitive advantage lost by the uncertified organization respondents is mainly inconvenience in international market entry and lower price set by some of their customers due to their mere being not ISO certified. However, for most of the organization they did not face chief challenge in selling their products to their existing customers but rather a shortage of input and capacity. According to the respondents even ISO certification is a definite plus in their market it is not yet a strict regulation in some of the European countries like Italia and Turkey.

Respondents in ISO 9001:2000 uncertified organizations indicated they use various quality assurance systems for product quality control laboratory tests, validation and verification tests at various points in their product realization process. However, when it comes to quality in management system strategic management, human resource and various administration activities are mentioned. From this it could be seen that quality is spread into various functions and activities of the uncertified organizations hence without any system to plan, coordinate, control and evaluate quality within the organizations.

Figure 4.7 Market Requirements for the segments



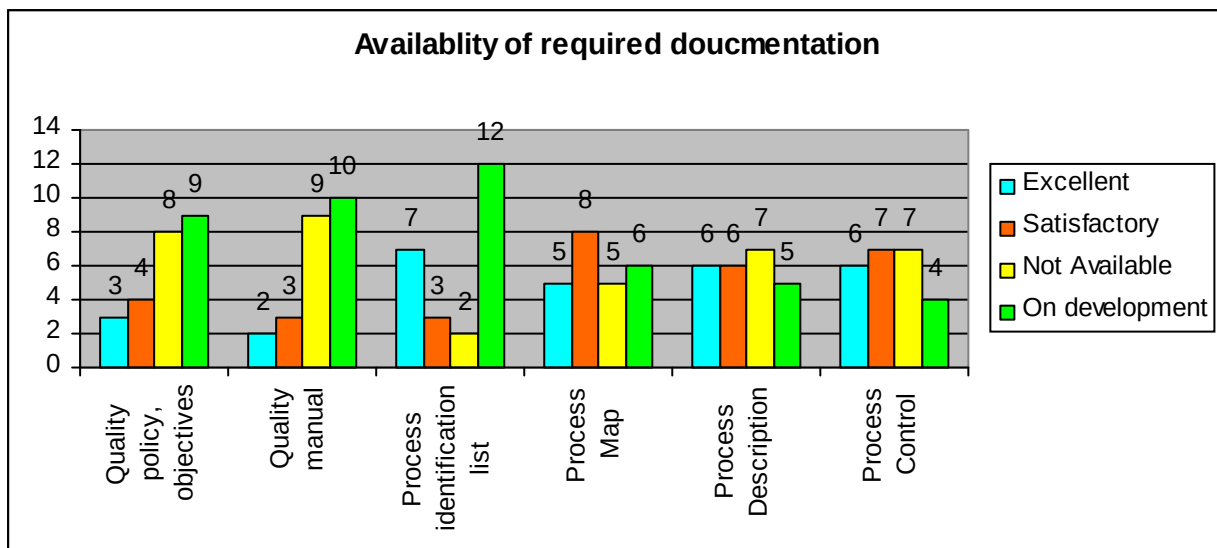
The major requirements from customers according to respondents is product quality 58%, followed by quality management system 25% the rest 17% responded environment management system, health and safety and employee rights to be frequently presented as requirements. From this it could be pointed that the main requirement from customers is quality.

Quality be it in process or product is a result of installing an efficient quality management system. Hence to gain competitive advantage in both international & local market as well as increase efficiency, effectiveness and economy for the internal processes of the sector it is crucial to install proper quality management system. And implementation of ISO 9001:2000 as an internationally accepted quality management system accredits organizations fulfilling the requirements set by the international standard.

#### 4.5 DOCUMENTATION Clause 4

ISO 9001 views documentation as a medium that supports organizations quality management system in terms of providing evidence of implementation and conformity to specified requirements. From the required documentation according to the respondents' process identification list and process map is lacking in most of the organization. The required documents are available in a complete manner in less than 25% of the organizations under study. This is a setback for the certification process however; the good news is that most organizations under study are in the process of developing these documents. This could be a good indication that these organizations are getting ready to implement quality management and eventually get their organizations certified for ISO 9001:2000.

Figure 4.8 Availability of documents required for ISO 9001 Certification



| <b>Required Documents</b>   | <b>Excellent</b> | <b>Satisfactory</b> | <b>On Development</b> | <b>Not Available</b> | <b>TOTAL</b> |
|-----------------------------|------------------|---------------------|-----------------------|----------------------|--------------|
| Quality policy, objectives  | 3                | 4                   | 9                     | 8                    | <b>24</b>    |
| Quality manual              | 2                | 3                   | 10                    | 9                    | <b>24</b>    |
| Process identification list | 7                | 3                   | 12                    | 2                    | <b>24</b>    |
| Process Map                 | 5                | 8                   | 6                     | 5                    | <b>24</b>    |
| Process Description         | 6                | 6                   | 5                     | 7                    | <b>24</b>    |
| Process Control             | 6                | 7                   | 4                     | 7                    | <b>24</b>    |

Table 4.2 Availability of documents required for ISO 9001 Certification

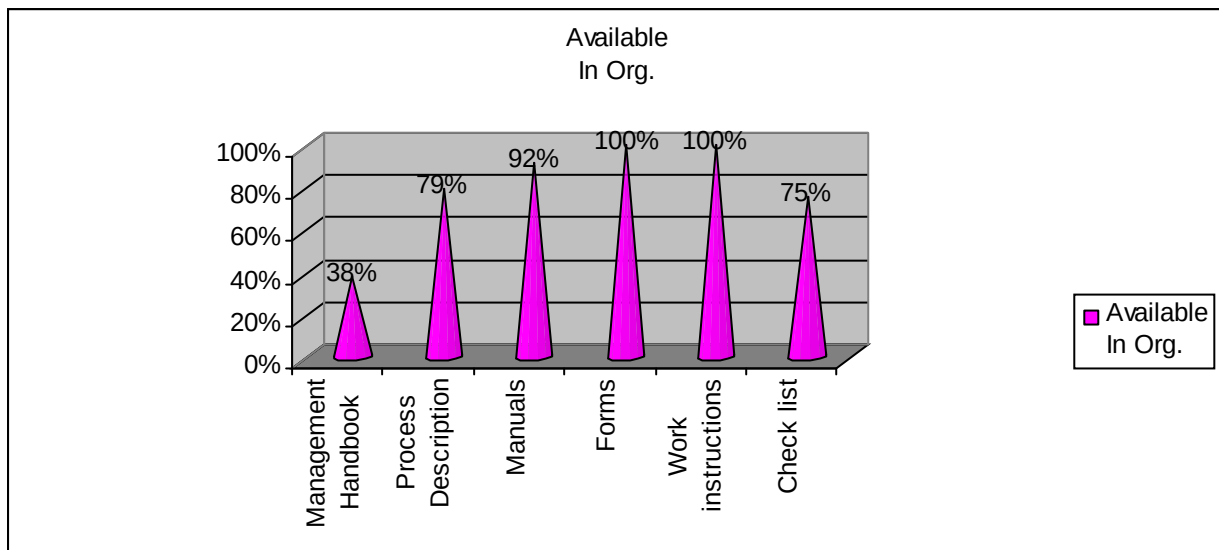
The availability of documented procedures shows a declining trend compared to the above basic documentation requirements. From the required six documented procedures for ISO certification three of them i.e. Control of non conforming products, corrective action and preventive action) are missing in almost half of the organizations under study. These procedures reflect the commitment of organizations with regards to continuous improvement and customer focus. Hence, organizations should give better focus on these areas and develop procedures. However, the number of organizations under development of these procedures is encouraging.

| <b>Documented Procedures</b>       | <b>Excellent</b> | <b>Satisfactory</b> | <b>On Development</b> | <b>Not Available</b> | <b>TOTAL</b> |
|------------------------------------|------------------|---------------------|-----------------------|----------------------|--------------|
| Control of Documents               | 5                | 3                   | 9                     | 7                    | <b>24</b>    |
| Control of records                 | 4                | 3                   | 8                     | 9                    | <b>24</b>    |
| Internal audit                     | 2                | 1                   | 5                     | 6                    | <b>24</b>    |
| Control of non conforming products | 3                | 2                   | 7                     | 12                   | <b>24</b>    |
| Corrective action                  | 3                | 2                   | 8                     | 11                   | <b>24</b>    |
| Preventive action                  | 3                | 2                   | 8                     | 11                   | <b>24</b>    |

Table 4.3 Availability of documented procedures required for ISO 9001 Cert

When it comes to the management system documentation in use by the organizations under study it could be seen that all use forms and work instructions. One interesting finding here is 92% of the organizations have a manual developed. This could be a good base for development of quality manual which is missing in most organizations because most organizations have the experience of developing manuals and most of the elements in their existing manuals could be adopted in developing quality manuals. Overall, the available management system documentation by organizations under study could be rated as above satisfactory.

Figure 4.9 Available management system documentations



Below table 4.4 shows the summary of documents and records which are not requirements for ISO 9001 certification but highly recommended for implementation of quality management system. Human resource and customer requirement documents and records are widely available in the organizations under study. These two areas are crucial in implementation of ISO: 9001 hence the focus given should be encouraged. The next widely available documents and records are product, process realization and procurement documents which could be considered as the core processes for leather manufacturing industries, Besides, the availability of these documents could be a good base to develop the lacking required documents for ISO 9001 certification See Table 4 .4 such as process identification list, process Map, process description and process Control.

| Documents/ Records                              | Available<br>in Organ<br>Number | Total Number<br>of<br>Organizations | Percentage<br>of<br>available |
|-------------------------------------------------|---------------------------------|-------------------------------------|-------------------------------|
| Management review                               | 14                              | 24                                  | 58%                           |
| Education training skills, experience           | 23                              | 24                                  | 96%                           |
| Process realization                             | 19                              | 24                                  | 79%                           |
| Design & development                            | 8                               | 24                                  | 33%                           |
| Verification validation, change in development  | 6                               | 24                                  | 25%                           |
| Verification, validation of measuring equipment | 8                               | 24                                  | 33%                           |
| Evidence of product tests                       | 17                              | 24                                  | 71%                           |
| Results of corrective actions                   | 7                               | 24                                  | 29%                           |
| Health & Safety                                 | 6                               | 24                                  | 25%                           |
| Suppliers list                                  | 17                              | 24                                  | 71%                           |
| Personnel File                                  | 23                              | 24                                  | 96%                           |
| Customer Requirement                            | 23                              | 24                                  | 96%                           |
| Audit Results                                   | 3                               | 24                                  | 13%                           |
| Loss & Damage to customers Property             | 3                               | 24                                  | 13%                           |
| Special process                                 | 5                               | 24                                  | 21%                           |
| Results of faulty measuring equipments          | 8                               | 24                                  | 33%                           |
| Failure type & Follow up measures               | 8                               | 24                                  | 33%                           |
| Results of preventive actions                   | 6                               | 24                                  | 25%                           |
| Government regulations                          | 12                              | 24                                  | 50%                           |
| Accident log                                    | 2                               | 24                                  | 8%                            |

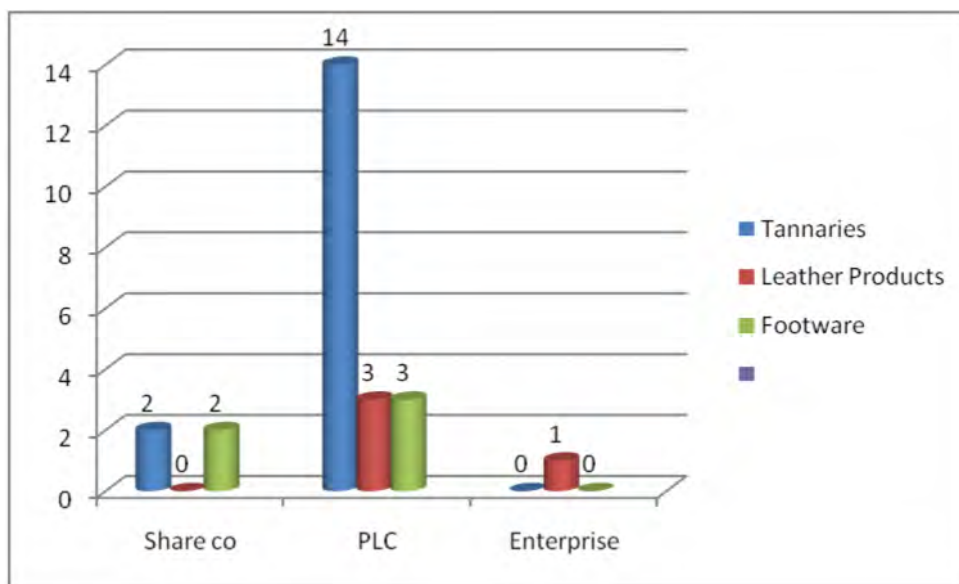
Table 4.4 Documents/ Records available in organizations

Audit results, loss and damage to customers Property and accident log are the list available documents and records in the organizations. This could be an indication that most organizations lack internal audit function and lack of customer property in their premises or low consideration given to customer property and accidents by the organizations.

#### 4.6 MANAGEMENT RESPONSIBILITY Clause 5

Eighty percent of the organizations under study have the legal status of Private Limited Company PLC. 16% and 4% consecutively goes to Public share companies and enterprise. From the total of twenty PLCs under study three of them were privatized from the public sector.

Figure 4.10 Ownership of Organizations under study



From this fact it could be concluded that the strategic decisions by the majority of the organizations to be under the private owners. Hence, the top management even has the potential to plan and execute priority strategies like implementing ISO9001:2000 quality management system the final blessing goes to the owner who should give the go ahead on major expenditures, allocation of human resource, time and effort etc...



Figure 4.11 Level of awareness by Top Management

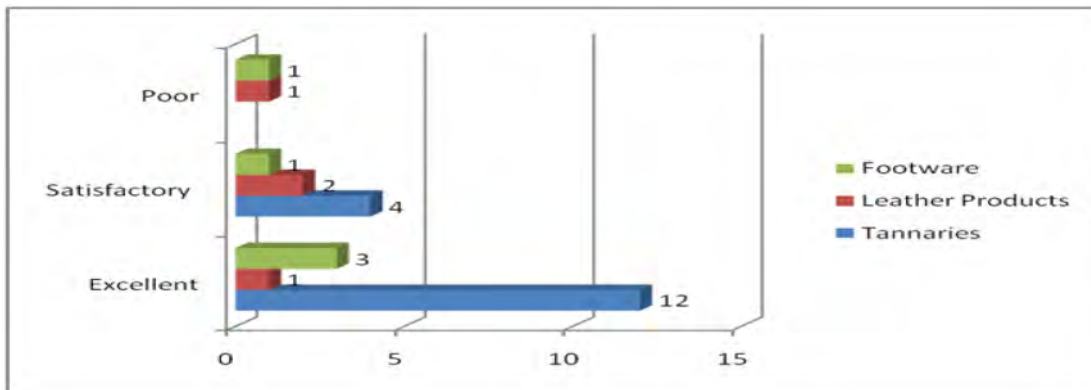
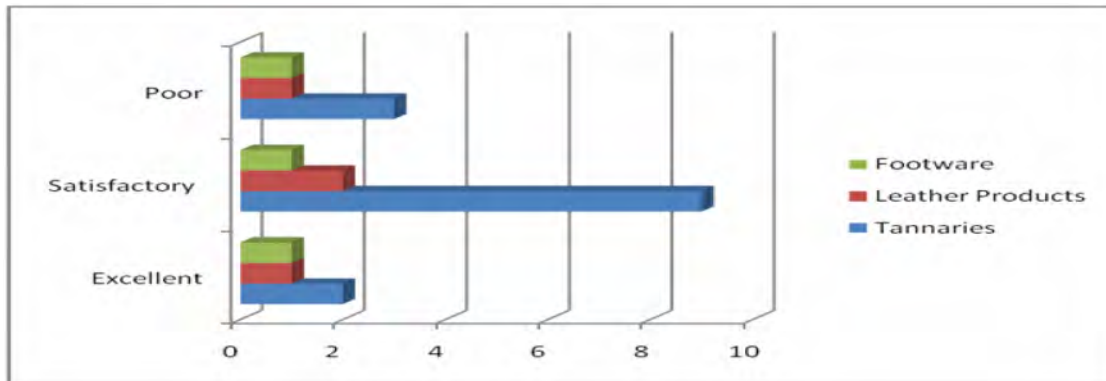


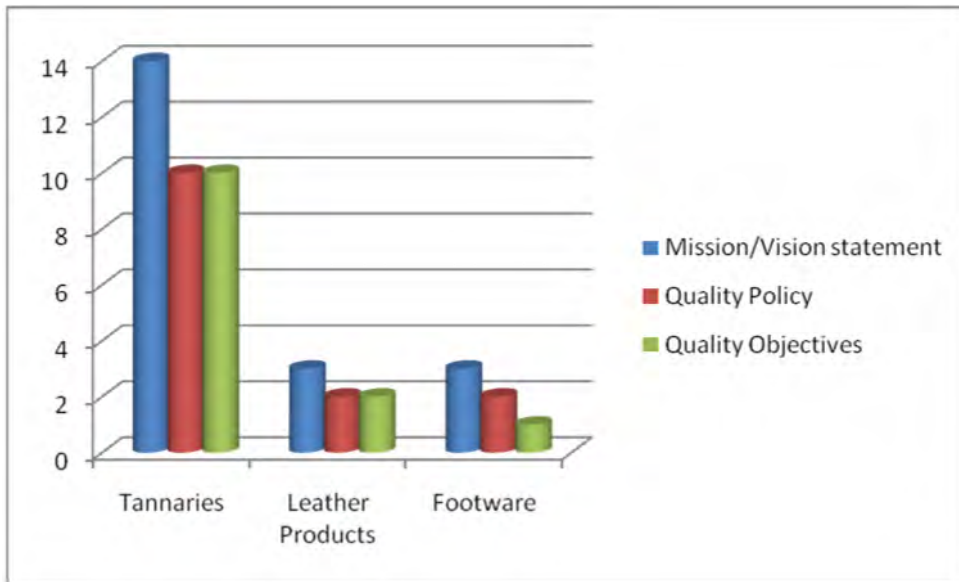
Figure 4.12 Level of awareness by Owners



As could be seen from the above figures fig 4.11, 4.12 the level of awareness is significantly better by the top management compared to the owners of the organizations. From the privately owned 21 organizations 13 responded that there is a level of difference in commitment between the owners and the top management.

The reason and difficulties faced between top management and owners in level of commitment by the respondents could be mainly summarized as owners view organizations have already market for their products hence no additional cost, energy and time should be incurred, in implementing the QMS and the lack of detail understanding of how QMS should be implemented, what changes it will bring by the owner. Hence for effective ISO 9001:2000 implementation awareness creation and getting the commitment of the owners is crucial.

Figure 4.13 Quality management and strategy

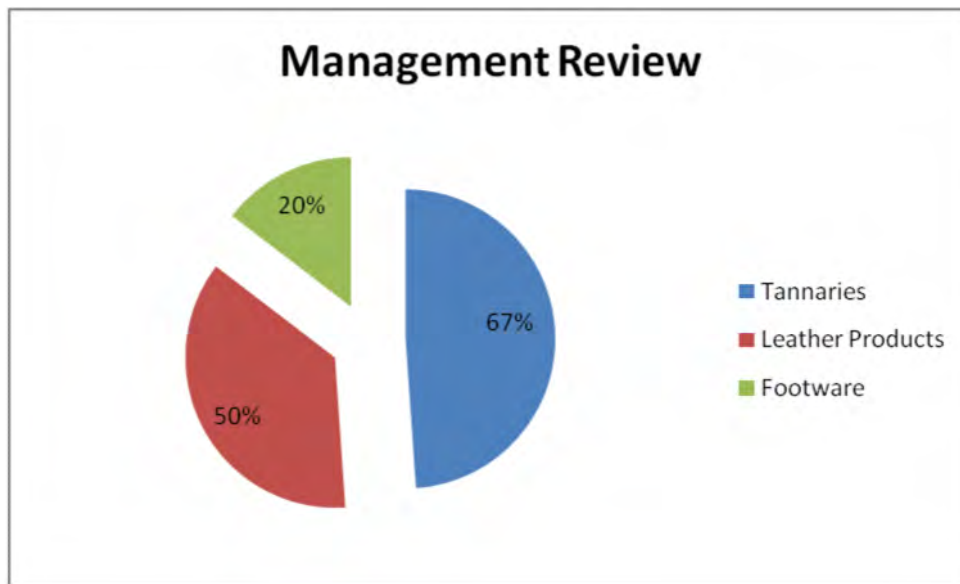


|                     | Have Mission/<br>Vision<br>Statements | Have Quality<br>policy | Have Quality<br>objectives | Total No<br>of Organ |
|---------------------|---------------------------------------|------------------------|----------------------------|----------------------|
| Tanneries           | 14                                    | 10                     | 10                         | <b>15</b>            |
| Leather<br>Products | 3                                     | 2                      | 2                          | <b>4</b>             |
| Footwear            | 3                                     | 2                      | 1                          | <b>5</b>             |

Table 4.5 Organizations with quality in strategic planning

One of the basic requirements of quality management system is that organizations should give due attention to quality in their strategic management. According to the respondents around 83% of the organizations have such strategic planning that they have mission and vision statements. However, the number of organizations decline to 54% when it comes to the more detailed planning such as setting quality objectives and policies. Therefore, it could be said that most of the organizations have the strategic management base however, they lack the detailed planning required for implementation of quality management. Hence, management should commit in detail planning of quality in setting clear objectives and policies required for implementing ISO 9001:2000.

Figure 4.14 Management Review



When it comes to management review meetings regarding quality, 67% of the tannery respondents, 50% of the leather product respondents and 20% of the footwear respondents replied that they conduct such meetings. From this it can be seen that the level of management commitment regarding quality is satisfactory especially for the tannery and leather product manufacturers but a lot remain from the management of footwear in their level of commitment in management review aspect.

More than 92% of the respondents replied that quality is communicated through the formal way of communications such as letters, forms, product sheets, reports, specifications, notice boards, recipe, and team meetings. About 8 % of the respondents have no formal communication hence use ad hoc methods of communication like word of mouth and unformatted sheets. Hence, the available media of communication is satisfactory for ISO 9001 implementation with minor standardizing and labeling of current formats in use.

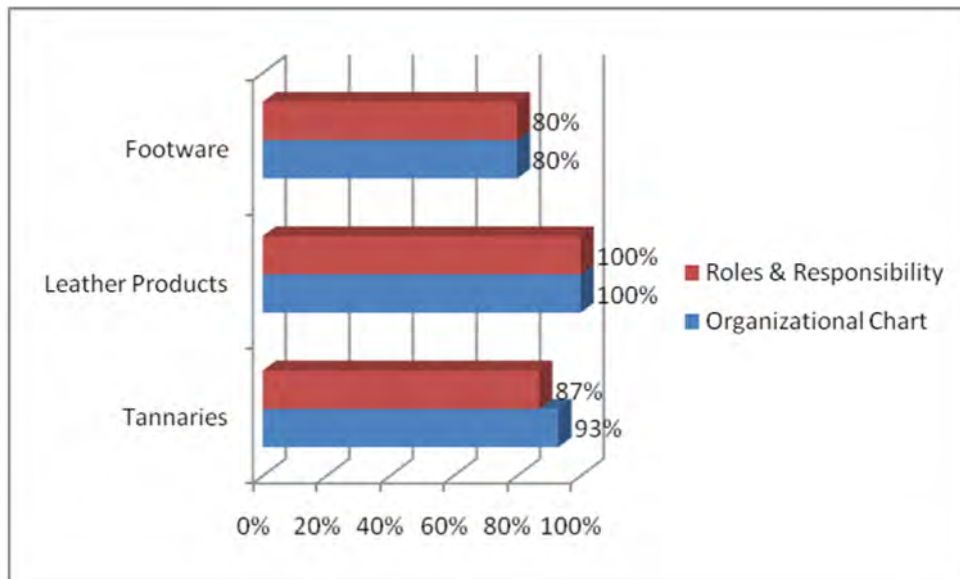
#### 4.7 RESOURCE MANAGEMENT Clause 6

##### *Human Resource*

According to the respondents from the organizations under study with the exception of two organizations all have organizational chart and with the exception of three organizations roles and responsibility has been assigned.

However, only nine organizations from the twenty four 38% from organizations under study have quality representative in their organizational chart. Seven of the quality representatives are from the operational management while in two of the cases the quality representatives are from the administrative staff. This shows even one of the basic requirements of ISO organizational structure, roles and responsibilities have been assigned by most of the organizations special place is not given for quality in their structure.

Figure 4.15 Availability of Organization chart with roles & responsibility



|                               | Tanneries | Leather Products | Footwear | Total      |
|-------------------------------|-----------|------------------|----------|------------|
| <b>Quality Representative</b> | 8         | 0                | 1        | <b>9</b>   |
| <b>No of org in segment</b>   | 15        | 4                | 5        | <b>24</b>  |
| <b>%</b>                      | 53.3%     | 0%               | 20%      | <b>38%</b> |

Table 4.6 Organizations with quality representative

Only 21% from the respondent organizations have training and development policy. This indicates quality improvement regarding human resource is conducted in ad-hoc manner hence organizations should make the effort to set up proper training and development policy for their employees. However 80% of the respondents indicated that their organizations keep proper records of education, training, skills and experience of their employees. Most this records are kept in personnel file. This is an encouraging aspect that most of the organizations have a proper data to plan, execute and control their personnel development.

|                                          | <b>Tanneries</b> | <b>Leather Products</b> | <b>Footwear</b> | <b>Total</b> |
|------------------------------------------|------------------|-------------------------|-----------------|--------------|
| <b>Training &amp; Development Policy</b> | 5                | 0                       | 0               | <b>5</b>     |
| <b>No of org in segment</b>              | 15               | 4                       | 5               | <b>24</b>    |
| <b>%</b>                                 | 33%              | 0%                      | 0%              | <b>21%</b>   |

Table 4.7 Organizations with Training & development policy

|                                          | <b>Tanneries</b> | <b>Leather Products</b> | <b>Footwear</b> | <b>Total</b> |
|------------------------------------------|------------------|-------------------------|-----------------|--------------|
| <b>Training &amp; Development Policy</b> | 13               | 4                       | 3               | <b>20</b>    |
| <b>No of org in segment</b>              | 15               | 4                       | 5               | <b>24</b>    |
| <b>%</b>                                 | 87%              | 100%                    | 60%             | <b>80%</b>   |

Table 4.8 Organizations with records of education & development

For the question how performance is evaluated for personnel performing work affecting quality 92% of the respondents respond using performance evaluation formats. However from the brief explanation and interviews made regarding the subject lack of quality objectives made the

performance evaluation incomplete regarding quality. For this reason, the organizations should set quality objectives and communicate with personnel performing work affecting quality his duties and responsibilities regarding quality to make the evaluation process effective

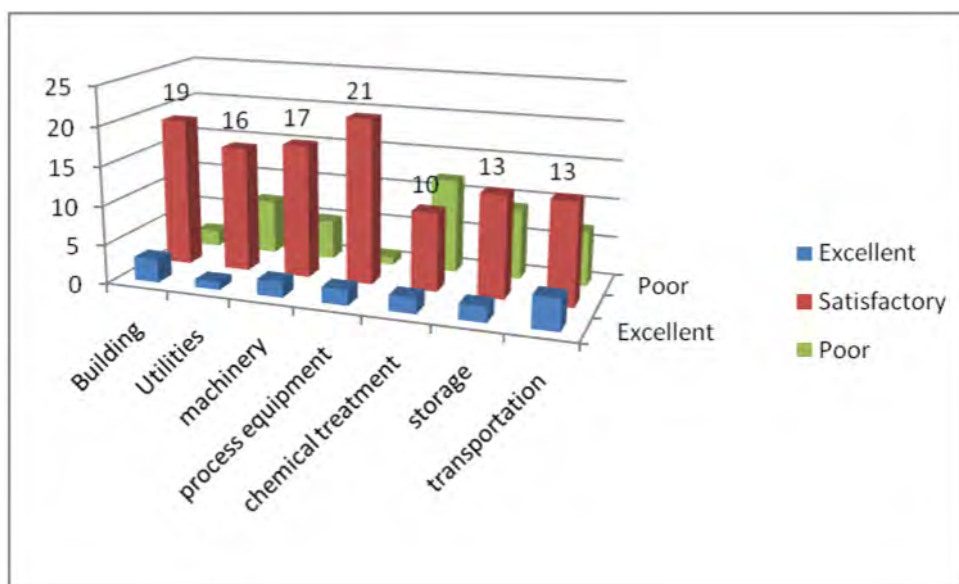
### ***Physical Resources***

The availability and management of physical resources of the organizations under study has been rated by the respondents as summarized below by table 4.9 and figure 4.16

| Physical Resources | Excellent | Satisfactory | Poor |
|--------------------|-----------|--------------|------|
| Building           | 3         | 19           | 2    |
| Utilities          | 1         | 16           | 7    |
| Machinery          | 2         | 17           | 5    |
| Process equipment  | 2         | 21           | 1    |
| Chemical treatment | 2         | 10           | 12   |
| Storage            | 2         | 13           | 9    |
| Transportation     | 4         | 13           | 7    |

Table 4.9 Availability and management of physical Resources

Figure 4.16 Availability and management of physical resources



The major problem faced regarding physical resources according to the respondents is the lack and management of chemical treatment plants. According to the interviews conducted the leather industry produces highly toxic waste but this waste and water could be recycled by installing a treatment plant. The installation cost is expensive but the operation cost is manageable. Possible assistance in commissioning and acquiring treatment plants is gained from UNIDO.

The other problems observed by the organizations under study are inadequate storage, transportation and utilities. These problems directly reflect on the quality of products as well as process of the organizations. Therefore organizations should schedule their processes according to their capacity and/or upgrade their capacity in various areas of their infrastructure to increase their efficiency and fulfill the requirements of ISO 9001 certification.

All the respondents except two responded that the management determine and manage work environment. According to the respondents, even no local standards are set for health and safety, sanitation and security the management of the organization address these issues in the various functional areas. However it is observed that in most organizations documented procedures for work environment is available. Based on the above facts it is recommended that management should benchmark proper procedures for work environment in the industry and adopt and maintain it in a documented manner. Documentation could serve as an evidence for availability of procedures and as well helps training, development and implementation of various work environment procedures.

#### ***Financial Resources***

|                                  | <b>Tanneries</b> | <b>Leather Products</b> | <b>Footwear</b> | <b>Total</b> |
|----------------------------------|------------------|-------------------------|-----------------|--------------|
| <b>Quality in financial plan</b> | 11               | 0                       | 3               | <b>14</b>    |
| <b>No of org in segment</b>      | 15               | 4                       | 5               | <b>24</b>    |
| <b>%</b>                         | 73%              | 0%                      | 60%             | <b>58%</b>   |

Table 4.10 Quality in Organizations financial plan

Regarding the consideration of quality in the financial plan especially in the tannery segment shows an encouraging potential followed by the footwear segment the leather products segment in the study seems a little bit reluctant to invest in quality.

|                               | <b>Tanneries</b> | <b>Leather Products</b> | <b>Footwear</b> | <b>Total</b> |
|-------------------------------|------------------|-------------------------|-----------------|--------------|
| <b>Allocated for ISO 9001</b> | 9                | 0                       | 3               | <b>12</b>    |
| <b>No of org in segment</b>   | 15               | 4                       | 5               | <b>24</b>    |
| <b>%</b>                      | 60%              | 0%                      | 60%             | <b>50%</b>   |

Table 4.11 Financial resources allocated for ISO 9001

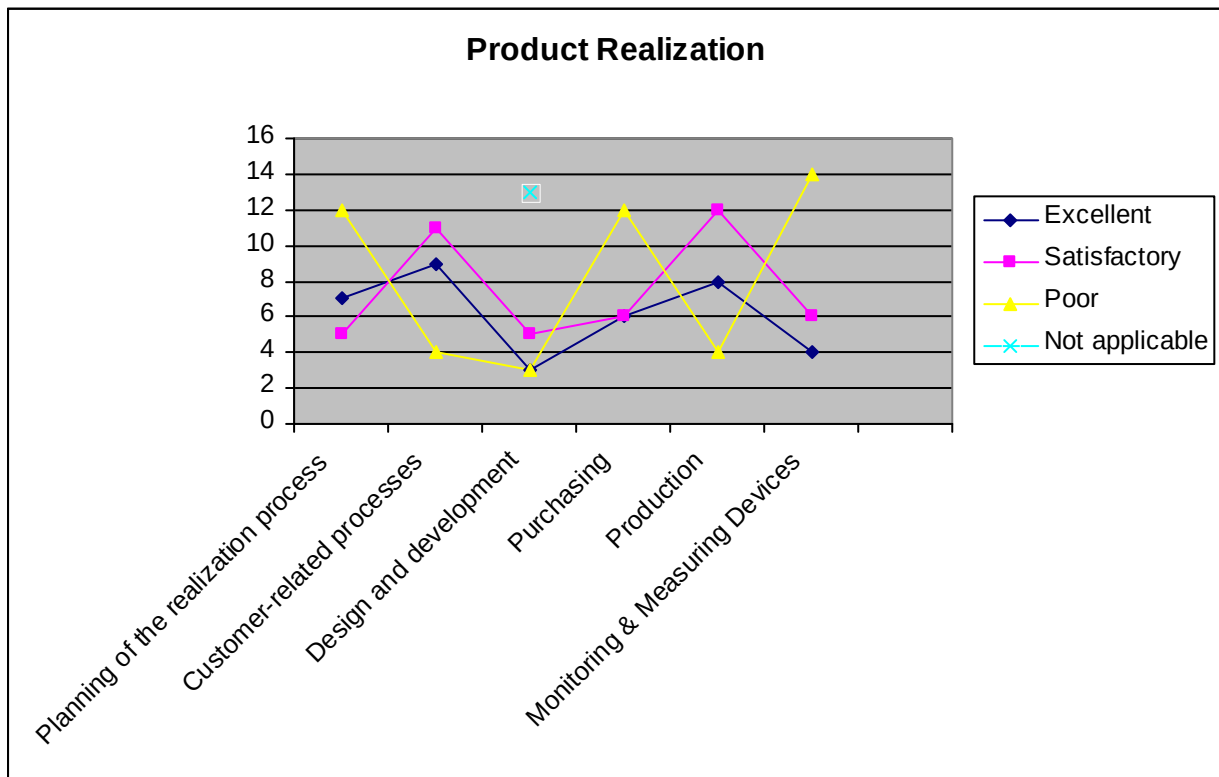
It could be concluded from table 4.6 and 4.7 that most of the financial resource allocated for quality is committed for implementation of ISO 9001:2000. The significant commitment shown in investing on quality could be due to an increase in awareness of the importance of quality management system. The recent accreditation of Quality and Standard Authority of Ethiopia QSAE as an international certifying body for ISO9001:2000 could be another factor that encouraged this trend because of the assumption that cost of accreditation will significantly decrease.

#### 4.8 PRODUCT REALIZATION Clause 7

The key problems observe in product realization process as per the respondents is poor product realization planning, purchasing and poor monitoring and measuring devices. Planning is crucial in achieving desired quality in process and product which significantly affects the efficiency of operation and result in control of undesired wastage and non confirming products before hand. Hence, organizations should consider planning in product realization as a crucial step in implementing quality management system.



Figure 4.17 Product realization processes



| Product Realization Process     | Excellent | Satisfactory | Poor | Not Applicable | TOTAL |
|---------------------------------|-----------|--------------|------|----------------|-------|
| Planning of realization process | 7         | 5            | 2    |                | 24    |
| Customer-related processes      | 9         | 11           | 4    |                | 24    |
| Design and development          | 3         | 5            | 3    | 13             | 24    |
| Purchasing                      | 6         | 6            | 12   |                | 24    |
| Production                      | 8         | 12           | 4    |                | 24    |
| Monitoring & Measuring Devices  | 4         | 6            | 14   |                | 24    |

Table 4.12 Product Realization Processes

Purchasing is also a core process which enables organizations to control the quality of their inputs. Since the quality of input mainly determines the quality of the organizations output in the leather industry special procedures and controls must be placed in the purchasing process. Monitoring and measuring devices enable operations to be per customer specification the fore due attention should be given for their availability and regular calibration.

#### 4.9 MEASUREMENT, ANALYSIS AND IMPROVEMENT Clause 8

One of the basic requirements in ISO 9001 is the ability to measure analyze and improve product and processes per customer orientation. 92 % of the respondents rate their customer communication efficiency in issues such as requirements, product information, enquiries, amendments, feedback and complaints to be medium and above.

| <b>Customer communication</b> | <b>Tanneries</b> | <b>Leather Products</b> | <b>Footwear</b> | <b>Total</b> |
|-------------------------------|------------------|-------------------------|-----------------|--------------|
| <b>High</b>                   | 6                | 1                       | 1               | <b>8</b>     |
| <b>Medium</b>                 | 8                | 2                       | 4               | <b>14</b>    |
| <b>Low</b>                    | 1                | 1                       | 0               | <b>2</b>     |
| <b>Total</b>                  | <b>15</b>        | <b>4</b>                | <b>5</b>        | <b>24</b>    |

Table 4.13 Efficiency of customer communication

This indicates majority of the organizations under study involve information such as requirements, feedbacks and complaints from their customers on their operational decisions such as process and product improvement. This is a good indication that the organizations under study have imbedded continuous improvement and change management tools that enables smooth implementation of the quality management system.

In the tannery segment respondents indicated that most of the customer requirement is communicated and documented with the sales agreement. And these requirements are mostly standards not subjected to change for a long period of time especially product requirements. However enquiries, amendments and complaints are responded immediately.

Since, most of the customers are located in the foreign market communication Medias such as telephone and e-mail are used. In response management takes corrective action to remedy failures. In the leather and footwear segments since products are subjected to fashion and change production and process is set up according to market response. Hence, customer requirements are addressed in such manner.

| <b>Quality information</b> | <b>Tanneries</b> | <b>Leather Products</b> | <b>Footwear</b> | <b>Total</b> |
|----------------------------|------------------|-------------------------|-----------------|--------------|
| <b>High</b>                | 5                | 1                       | 0               | <b>6</b>     |
| <b>Medium</b>              | 7                | 1                       | 4               | <b>12</b>    |
| <b>Low</b>                 | 3                | 2                       | 1               | <b>6</b>     |
| <b>Total</b>               | <b>15</b>        | <b>4</b>                | <b>5</b>        | <b>24</b>    |

Table 4.14 Availability of quality information

The rating of availability of quality information reflects the internal system of continuous improvement which includes collecting data about quality in the organization, analyzing it and benchmarking, taking preventive and corrective action. The number of respondents rating the system above medium has declined from 92% in customer communication to 75% in quality information system. This shows that organizations have to look inward, make use of their internal information to boost their learning curve and improve in such performance measurements such as efficiency, effectiveness and economy.

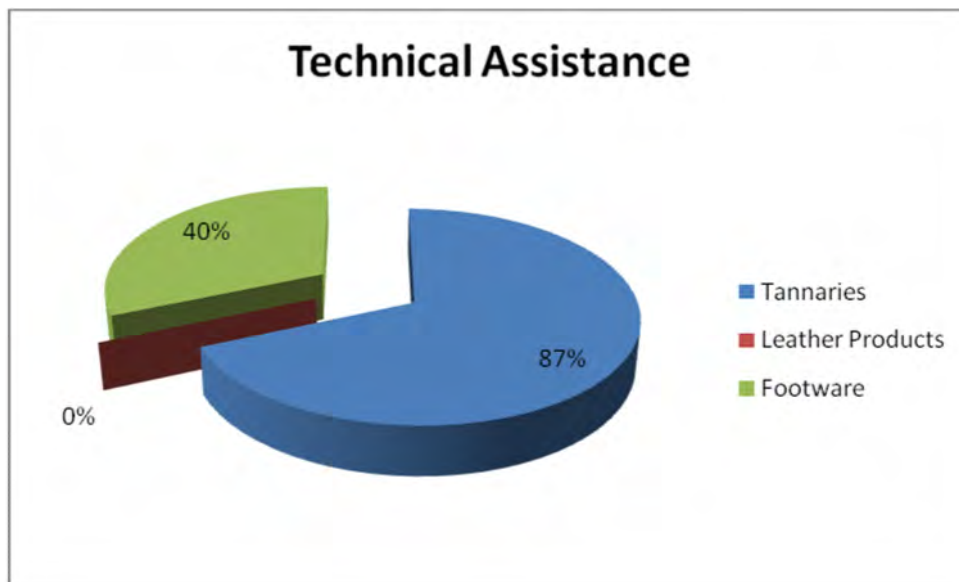
#### 4.10 ASSISTANCE

87% of the respondents in the tannery segment and 40% of the respondents in the footwear industry responded they got technical assistance regarding ISO 9001 certification. While no

respondent from the leather product industry got any sort of technical assistance regarding ISO: 9001 certification. This is not a good sign in the implementation of quality management system in the leather and leather product industry considering the top down strategy for the sector focuses on encouraging finished goods processing and exporting.

Besides the already certified two tanneries in the study nine more tanneries and one footwear company are starting the preparation process for the certification of ISO 9001:2000. The major assistance in the certification process according to the respondents is gained from Engineering Capacity Building Program (ecpb) which works in cooperation with GTZ and enabled the accreditation of Quality and standard authority of Ethiopia QSAE and also have a special section for leather industry development. ECPB is given credit by this organization on giving trainings and qualifying employees in the sector regarding ISO: 9001 and professional assistance in the development of documentations necessary for ISO certification.

Figure 4.18 Technical assistance



Other organizations that have given technical assistance regarding quality include Ethiopian Cleaner Production center ECPC , Productivity Improvement Center PIC , Ethiopian Export Promotion Agency EEPA , Ethiopian Leather Industries Association ELIA , Ethiopian Leather

Technologists & Chemists Society, Leather and Leather Products Technology Institute LLPTI , Quality Standards Authority of Ethiopia QSAE , and Textile & Leather Industry development center.

#### 4.11 CHALLENGES

The major challenges in the certification process according to respondents are the cost of certification expenditures related to hiring consultants, certification audit fees, upgrading infrastructure etc..., development of documents required for certification takes time, hence result in more time to be sacrificed by professionals like operation managers, lack of owner's commitment in availing resource and time is also presented as a major set back, rearrangement of facility and reorganization of existing organization, and finally fear of change from employees in implementing quality management system.

Hence, the top management faces the main challenge in the implementation process because they have to create awareness in their organizations. They have to convince the owners of organizations so that they could commit resources as well as create awareness in their organizations so that employees who are the key players in the implementation of ISO 9001 contribute favorably to the change.

Top management has to plan the implementation process so that it could be done without major break down in the on going processes, creates major stress in the operation managers and quality related work force, and should use wisely scarce financial resources in areas such as hiring consultants and restructuring facilities.

## 5. SUMMARY, CONCLUSION AND RECOMENDATION

### 5.1 SUMMARY

The leather and leather products industry LLPI in Ethiopia exports leather and semi - processed hides and skins which constitute the second major export product earning 10-20% of the countries foreign currency, and contributes 7% to 10% of the total value of manufactures, 6% of the total salaries and value added and almost 4% of employment. Hence, the industries strategical importance for development could be rated as critical.

This study was conducted to address importance, challenges and possible assistance in Quality Management system ISO 9001:2000 implementation in the leather and leather products industry LLPI in Ethiopia and conduct gap analysis to explain the current situation of the sector and recommend best practices in implementation of the standard.

The LLPI in Ethiopia has three major industrial components: the tanneries producing the leather, the footwear manufacturers and the leather products manufacturers. The study was conducted on 25 organizations selected on convenience base, representing 73% of the tanneries, 38% of the footwear manufacturers and 29% of the leather product manufacturers. The major findings of the study are:-

- ISO9001:2000 certification improve customer satisfaction, maintenance of international customers and access to new markets as well as increase efficiency, effectiveness and economy of internal management and processes.
- Only two organizations from the LLPI are certified so far for ISO9001:2000.
- Besides the cost of certification expenditures related to hirin g consultants, certification audit fees, upgrading infrastructure etc..., development of documents required for certification takes time, hence result in more time to be sacrificed by professionals like operation managers, lack of owner's commitment in availing resource and time is also presented as a major set back, rearrangement of facility and reorganization of existing organization, and finally fear of change from employees in implementing quality management system are challenges faced in the implementation process.

- Most organizations in the LLPI have the legal status of Private Limited Company PLC. Hence, final decision makers in issues like ISO 9001 implementation are the owners, private entrepreneurs.
- Even there are various support organizations working around the leather industry only two agencies i.e. Engineering Capacity Building Program ecpb and standard authority of Ethiopia QSAE focused on the certification of ISO 9001:2000. The attention given to the footwear and leather product segments of the industry is poor.
- The required documents and documented procedures required for ISO certification are not available in a complete manner in most of the organizations under study. This is a major setback for the certification process.
- Most of the organizations have strategic planning base that they have mission and vision statements. However, they lack more detailed planning such as setting quality objectives and policies.
- Requirements such as management review, customer focus, human resource management, communication are found at a satisfactory level in most of the organizations. However quality representative is not assigned in most organizations.
- Critical infrastructures such as waste treatment plant, storage, transportation are not available adequately in number of organizations.
- The key problems observed in product realization process are poor product realization planning, purchasing and poor monitoring and measuring devices.
- Customer communication in issues such as requirements, product information, enquiries, amendments, feedback and complaints is found in satisfactory level in most of the organization. However, quality information system including corrective, preventive and continuous improvement data left so much to be desired.

## 5.2 CONCLUSION

Major advantage of ISO: 9001 certification for the leather and leather products industry LLPI in Ethiopia is enhanced competitiveness in the international market and the resulting profitability. Competitiveness could be expressed in access to new markets, better prices and maintenance of international customers that lead to profitability and growth of the organizations.

The other benefits to be gained from the certification include productivity, increased efficiency and effectiveness of internal management processes, better work environment, reduced cost, continuous improvement, greater consistency in production and products, better documentation, available information for easy and prompt decisions.

The major challenges in the certification process includes the cost of certification, time and effort required to develop documents, procedures and implement the quality management system as well as infrastructure developments. One important point to make here is management commitment without the awareness and readiness of owners of the organizations makes the certification effort impotent.

Various government bodies, development agencies, associations, and institutes gave attention to the leather sector and provide assistance. However, few of them focus on ISO 9001 certification. Hence, a lot remains by support organizations in creating awareness and developing means of solving ISO 9001 implementation problems.

In the gap analysis the major requirements not present in these organizations are lack of proper QMS documentation, procedure and records, poor product realization tools such as planning, purchasing, monitoring and measuring devices, calibration and lack of internal audit. Other requirements not at satisfactory level in the industry are missing infrastructure like waste disposal, water treatment plant, poor quality objective setting, lack of continuous improvement tools such as preventive and corrective action, and lack of control and disposal means for non conforming or bad product, and traceability.



### 5.3 RECOMENDATION

Organizations in the leather and leather product industry should give due attention for ISO certification realizing the benefits to be gained in profitability, productivity and efficiency. Ways to make the certification process and the implementation of quality management system less demanding must be devised. Some recommendations are:-

- Awareness and commitment creation strategies not only to the top management but to the owners of organizations in the LLPI must be devised. Since crucial allocation of resource, time, and finance could truly come from the owners.
- Cost of certification is the major challenge in implementation of ISO: 9001. Quality and standard Authority of Ethiopia is now accredited to certify organizations. Therefore, funds and technical assistance to lower cost of certification must be devised to attract more organizations to the certification process.
- For most of the uncertified organizations the existing documentation and management system could be restructured and upgraded with reasonable cost and effort to fulfill the ISO 9001:2000 requirements. Hence, organizations should take inward looking approach to start implementation by making use of existing documents and system without major break downs of the ongoing processes.
- Infrastructure development storage, chemical treatment, transportation) should be given due attention in implementation of ISO 9001:2000 which determines the quality, safety, environment friendliness and productivity of the organizations. In the leather industry toxic waste create major problems with the development of strict environment regulations hence, special focus for treatment plants and waste disposal must be given by organizations.
- In the product realization process of the LLPI special attention should be given to planning, purchasing, monitoring and measuring devices which determines the quality of end product, customer satisfaction, traceability etc... ultimately the productivity and profitability of the organizations.

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## 6. BIBLIOGRAPHY

- A.V. Feingnabum ; 1983 Total quality control, 2nd ed.; Mc Graw-Hill, Books.
- Berhanu and Kibre; 2002 The Ethiopian Leather Sector- Developments and Challanges, UNIDO
- C.W. Russ Ruso, Tracy Callway Russo; 1998 Interpreting ISO 9000 for services, solutions for registered organizations ; Mc Graw-Hill Companies.
- CEN European Committee for standardization;2000 ISO 9001:2000; ISO
- CEN European Committee for standardization;2008 ISO 9001:2008; ISO
- Charles. Mills ;1989 The quality audit, A management evaluation tool; TataMc Graw Hill Companies Inc
- David F. ;1997 Strategic Management 6th ed. Printce Hall
- Frank Barnes ;2000 Good Business Sense Is the Key to Confronting ISO 9000 Review of Business.
- Godfrey, A. B ;1999 Juran's Quality Handbook, New York, Mc Graw-Hall.
- Haider Syed Imitaz; 2001 Document development compliance manual, CRC Press Ilc.
- ILIRI;1969 Manual on Rural leather tanning, Livestock and met board, Addis Ababa
- ISO ;1986 ISO 8042 , ISO.
- ISO Sandards Compodeim ;1998 Quality management; 7th ed. ISO
- ISO Sandards Compodeim ;2005 The ISO Survey – 2005, ISO.
- J.M Juran & Frank M. Gryna; 1970 Quality planning and analysis; 3rd ed. TataMc Graw Hill Companies Inc.
- Jim Wade ;Ma y-June 2002 Is ISO 9000 really a standard?, ISO
- John Krucithof & Jeff Ryass; 1994; Then quality standards hand book, Australian Print Group.
- John Seddon ;2000 A Brief History of ISO 9000: Where did we go wrong?, 2nd ed; Oak Tree Press.
- Kiruthu Takele ;2008 Exporting sector Development, CCE
- Kodama ;2001, Leather products development, UNIDO
- Lesely Munro-Faure, Malcolm Munro-Faure & Edward Bones;1995; Achieving the new international quality standards; Muro Associates, Pitman Publishing
- Micheal Hammer; June, 1990 Reengineering Works, don't Automate; Obliterate Harvard Business Review.
- Muchie Wandeber 2007, Livestock value chain of Ethiopia, ILIRI
- Naveh. E., Marcus, A. ;2004. " When does ISO 9000 Quality Assurance standard lead to performance improvement?", IEEE Transactions on Engineering Management
- Perry Johnson ; 1997 ISO 1400 Wiley Quality management, The business managers complete guide to Environmental management, John Wiley & Sons Inc.
- Pyzdek, T ; 2003 Quality Engineering Handbook; Practice hall Inc.
- QSAE;Jan. 2008; QSAE CERT Brochure, OF/QCD/2.3, QSAE
- Scott Dalgleish ;April 1, 2005 Probing the Limits; ISO 9001 Quality Magazine
- Senn Jemmer ;1987 Reasons Why Companies Should Have ISO Certification 3rd ed. California; Wads worth, publishing co.
- Stephanie Clifford ;2003 So many standards to follow, so little payoff 2nd ed;

- UNIDO ;2005; A Strategic Action Plan for the Development of the Ethiopian Leather and Leather Products Industry Volume II; UNIDO
- Winters D. ;1980 Establishment of a tannery, Fesality Study; UNIDO.
  
- o <http://www.nuri-allied-consultant.com>, Implementation of ISO9001;QMS; last date accessed March,2009
- o <http://www.iso.org/iso/catalogue/> management standards; May 2009
- o <http://www.iso9001documents.blogspot.com> ISO 9000 certification; April 2009
- o <http://www.bds-ethiopia.net> Leather Export; April 2009
- o <http://www.developments.org.uk>, Leather Ethiopia's secret weapon; April 2009
- o <http://www.ictefa.org>, Communication in organizations; April 2009
- o <http://www.qualityschool.org>, Changes in ISO 9000; April 2009
- o <http://www.elicopl.com>, Export Products; March 2009
- o <http://www.gsae.org>, Quality certification; March 2009
- o <http://www.iso.ch>, ISO 9001 Standards and Interpretation; March 2009
- o <http://www.worldbank.org> Ethiopia; April 2009
- o <http://www.worldpress.org>, Ethiopia Textile & Leather Industry, April 2009
- o <http://www.auditdatabase.com> Capturing Internal Audit, April 2009
- o <http://www.tga.gmbh.de> Accreditation of certification bodies by TGA; March 2009
- o <http://www.ethioexport.org> Leather & Footwear; March 2009
- o <http://www.referencenter.com>, Quality Assurance; March 2009,
- o <http://www.undp.org>, Ethiopian Leather Products; march 2009
- o <http://www.usaidethiopia.org> Export Products; march 2009
- o <http://www.wikipedia.com> , ISO 900; April 2009



Major Producers of Leather Garments Capacity Utilization

| COMPANY                                  | INSTALLED<br>CAPACITY PCS. / DAY | CURRENT OUTPUT<br>PCS. / DAY |
|------------------------------------------|----------------------------------|------------------------------|
| Modern Zege Leather                      | 50                               | 17                           |
| Eth-Sung Bin Leather Garments Factory    | 120                              | 50                           |
| Genuine Leather Craft                    | 60                               | 40                           |
| ELICO-Universal Leather Articles         | 150                              | 20                           |
| Kinaff Leather Garments                  | 40                               | 10                           |
| General Leather Works                    | 20                               | 10                           |
| Joy Leather Garments                     | 60                               | 25                           |
| Alex Leather Garment Production          | 60                               | 30                           |
| Abyssinia Leather Industry               | 40                               | 20                           |
| JONZO Private Ltd.                       | 40                               | 10                           |
| B.B. Leather Garments                    | 10                               | 7                            |
| Awash leather Products Enterprise        | 40                               | 20                           |
| Abayenesh Beyne Leather Garments Factory | 50                               | 30                           |
| SALMEDA Leather Products                 | 20                               | --                           |

Source: UNIDO, M. A. EL-Khair, November 2006

### Major Producers of Leather Goods

| Company                                        | Status & Type of production                                                                                                                                                     |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Erkab plc.                                     | Production of complimentary items such as: folders, wallets, brief cases                                                                                                        |
| Elico Group-Universal Leather Articles Factory | Production of hand bags, working gloves, school bags, document holders, brief cases, diplomat cases, travel bags, wallets, belts, purses, key holders, desk pads, leather sofas |
| Eth. Sung Bin Leather Garment Factory P.L.C.   | Main production: garments. Production of leather goods only to order, and supply to own shops.                                                                                  |
| Genuine Leather Craft Pvt Ltd Company          | Main production: garments. Production of leather goods only to order, and supply to own shop Products: Handbags, travel bags                                                    |
| General Leather Goods Maker                    | Main production: garments. Production of leather goods only to order and to the own shop Products: Handbags, wallets, belts.                                                    |
| Modern Zege Leather Products Industry          | Main production: garments. Production of leather goods only order and to own shop. Products: Handbags, wallets, belts.                                                          |
| Jonzo Ltd                                      | Main production: garments. Production of leather goods only to order and to the own shop Products: Handbags, travel bags                                                        |

Source: UNIDO, M. A. EL-Khair, November 2006

ADDIS ABABA UNIVERSITY  
FACULTY OF BUSINESS AND ECONOMICS  
DEPARTMENT OF MANAGEMENT MBA PROGRAM

Sample questionnaire to be distributed to managers

This questionnaire is prepared by a student of Addis Ababa University to assess the importance of implementing ISO 9001 quality management system) in the leather industry, and evaluate the implementation process. The Outcome of the study will help to suggest possible solutions from the problems observed. You are kindly requested to fill the questionnaire as frank and reasonable as possible. I assure you that the response for this question is kept confidential and only for academic purpose only.

Directions

- A. For the questions followed by choice write an X in the space provided.
- B. Questions followed by blank spaces write you're short answers
- C. Questions choosing Yes/no \_\_\_\_\_ circle your choice and put your remark on the dash.
- D. Questions asking for rank, write the order of your choice in front of the options given, from the first to the last in sequence 1, 2 , 3.... Skip the options that are not applicable.

Thank you in advance for your cooperation!

Name of Organization \_\_\_\_\_

Questions

I, about you

1. How old are you?
 

|                                   |                                   |                                |
|-----------------------------------|-----------------------------------|--------------------------------|
| <input type="checkbox"/> Below 20 | <input type="checkbox"/> 20-30    | <input type="checkbox"/> 30-40 |
| <input type="checkbox"/> 40-50    | <input type="checkbox"/> above 50 |                                |
2. Your educational back ground?
 

|                                        |                                              |                                       |
|----------------------------------------|----------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Below Diploma | <input type="checkbox"/> Diploma             | <input type="checkbox"/> First Degree |
| <input type="checkbox"/> Second Degree | <input type="checkbox"/> above Second Degree |                                       |
3. How long have you been working in your Organization? \_\_\_\_\_
4. Please write your present job title? \_\_\_\_\_

II, Organization

5. When was your organization established? \_\_\_\_\_
6. In which sector does you're organization work on?
 

|                                    |                                           |
|------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Tannery   | <input type="checkbox"/> Leather Products |
| <input type="checkbox"/> Foot ware | <input type="checkbox"/> others           |

Others, please specify? \_\_\_\_\_
7. What products or services does your business provide?  
\_\_\_\_\_



8. Is your company ISO 9001 quality management system) certified?

☐ Yes ☐ No

If no, do you have other quality assurance/control system? \_\_\_\_\_

\_\_\_\_\_

9. Where are your major customers located?

☐ Local Market ☐ Export Market

If export, do they require ISO Certification? \_\_\_\_\_

10. Please rank in order from 1 - 6 from most frequently asked requirements to the least by your customers?

\_\_\_ Health & Safety \_\_\_ Environmental \_\_\_ Product quality

\_\_\_ Quality Management \_\_\_ Employee \_\_\_ Others

Others, please specify? \_\_\_\_\_

## III, Documentation

11. How do you evaluate the availability of the following documents required by ISO 9001:2000?

|                                |                                    |                                       |                                        |                                         |
|--------------------------------|------------------------------------|---------------------------------------|----------------------------------------|-----------------------------------------|
| 1, Quality policy, Objectives  | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 2, Quality manual              | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 3, Process Identification list | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 4, Process Map                 | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 5, Process Description         | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 6, <b>Process Control</b>      | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |

12 How do you evaluate the determination, availability, use and management of the following six documented procedures required by ISO 9001:2000?

|                                      |                                    |                                       |                                        |                                         |
|--------------------------------------|------------------------------------|---------------------------------------|----------------------------------------|-----------------------------------------|
| 1, Control of Documents              | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 2, Control of Records                | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 3, Internal Audit                    | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 4, Control of nonconforming Products | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 5, Corrective action                 | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |
| 6, Preventive action                 | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Not Available | <input type="checkbox"/> On Development |

13 Please check the available management system documentation in your business?

\_\_\_ Management Handbook \_\_\_ Manuals \_\_\_ Work instruction

\_\_\_ Process description \_\_\_ Forms \_\_\_ Check list \_\_\_ others

Others, please specify? \_\_\_\_\_

\_\_\_\_\_

14, please check the documentation/records available in your business?

\_\_\_ Management review

\_\_\_ Suppliers List

\_\_\_ Education, training, skills, experience

\_\_\_ Personnel File

\_\_\_ Process Realization

\_\_\_ Customer Requirement

\_\_\_ Design & development

\_\_\_ Audit results

- |                                                                          |                                                              |
|--------------------------------------------------------------------------|--------------------------------------------------------------|
| <input type="checkbox"/> Traceability of Products                        | <input type="checkbox"/> loss & damage to customer property  |
| <input type="checkbox"/> Verification, validation, change in development | <input type="checkbox"/> Special process                     |
| <input type="checkbox"/> Verification, validation of measuring equipment | <input type="checkbox"/> Results of faulty measurement equip |
| <input type="checkbox"/> Evidence of product tests                       | <input type="checkbox"/> Failure types & follow up measures  |
| <input type="checkbox"/> Results of corrective actions                   | <input type="checkbox"/> Results of preventive actions       |
| <input type="checkbox"/> Customer Complaints                             | <input type="checkbox"/> Government regulations              |
| <input type="checkbox"/> Health & safety                                 | <input type="checkbox"/> Accident log                        |

Others, please specify? \_\_\_\_\_

## IV, Management

11. Who owns the business?

- ☐ Public Share Company      ☐ Private Limited Company      ☐ Enterprise  
☐ Partnership      ☐ Others

Others, please specify? \_\_\_\_\_

13. Is the owner aware of ISO 9001 Certification?

- ☐ Yes      ☐ No

14. Is the top management aware of ISO 9001 Certification?

- ☐ Yes      ☐ No

15. Does the business have a mission or vision statement? Yes/no \_\_\_\_\_

16. Does the business have a quality policy? Yes/no \_\_\_\_\_

17. Does the business establish quality objectives? Yes/no \_\_\_\_\_

18. Is quality included in the planning process? Yes/no \_\_\_\_\_

19. Does the management conduct review meetings regarding quality? Yes/no \_\_\_\_\_

20. Does the organization have formal quality communication methods? Yes/no \_\_\_\_\_

Please Specify? \_\_\_\_\_

## V, Resource Management

Human resource

21. Do you have a documented Organizational chart?

- ☐ Yes      ☐ No

Do you have quality in the structure? \_\_\_\_\_

22. Roles and responsibilities been designed?

- ☐ Yes      ☐ No

Do you have responsible person for Quality system? If so please describe position, background? \_\_\_\_\_

23. Does the business have a training and development policy? Yes/no \_\_\_\_\_

24. Is there records of education, training, skills and experience? Yes/no \_\_\_\_\_

Resource

25. How do you evaluate the availability, and management of the following Infrastructure needed to achieve conformity to product requirements?

- |           |                                    |                                       |                               |
|-----------|------------------------------------|---------------------------------------|-------------------------------|
| Buildings | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor |
| Utilities | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor |
| Machinery | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor |

|                    |                                    |                                       |                               |
|--------------------|------------------------------------|---------------------------------------|-------------------------------|
| Process Equipment  | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor |
| Chemical treatment | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor |
| Storage            | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor |
| Transportation     | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor |

If you have comment on specific issue, please? \_\_\_\_\_

26. Does the management consider quality in the business financial plan? Yes/no \_\_\_\_\_

27. Have financial resources been allocated to implement ISO 9001? Yes/no \_\_\_\_\_

## VI, Product Realization

28 How do you evaluate the following product realization processes?

|                                   |                                    |                                       |                               |                                         |
|-----------------------------------|------------------------------------|---------------------------------------|-------------------------------|-----------------------------------------|
| 1, Planning Product Realization   | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor | <input type="checkbox"/> Not Applicable |
| 2. Customer related process       | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor | <input type="checkbox"/> Not Applicable |
| 3, Design & Development           | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor | <input type="checkbox"/> Not Applicable |
| 4, Purchasing                     | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor | <input type="checkbox"/> Not Applicable |
| 5, Production                     | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor | <input type="checkbox"/> Not Applicable |
| 6, Monitoring & Measuring Devices | <input type="checkbox"/> Excellent | <input type="checkbox"/> Satisfactory | <input type="checkbox"/> Poor | <input type="checkbox"/> Not Applicable |

## VII, Continuous improvement

31. How do you evaluate the efficiency of Customer communication in your business in issues such as requirements, product information, enquiries, amendments, feed back and complaints ?

☐ High ☐ medium ☐ low

32. How do you evaluate the efficiency of Quality Information the system of collecting data about quality in your business, analyzing and taking preventive and corrective actions?

☐ High ☐ medium ☐ low

## VIII, Assistance

33. Did the business get any technical assistance or awareness creation opportunity from development agencies, associations, or any other bodies regarding ISO 9001 certification?

☐ Yes ☐ No

If yes, briefly explain who, and what assistance gained? \_\_\_\_\_

If you have any comment on these agencies activities regarding ISO certification? \_\_\_\_\_

## IX, Challenges

34. What major challenges does your business faced, experienced or anticipate in implementing ISO 9001? Please explain? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_,Thanks.

ADDIS ABABA UNIVERSITY  
FACULTY OF BUSINESS AND ECONOMICS  
DEPARTMENT OF MANAGEMENT

Interviews conducted with information Personnel or equivalent.

This interview is prepared by a student of Addis Ababa University to identify the overall performance of their organization from implementing quality management system ISO 9001:2000. The Outcome of the study will help to suggest possible solutions from the problems observed. They are kindly requested to response the questions as frank and reasonable as possible. Assure that the response for this question is kept confidential and only for academic purpose only.

Thank in advance for their time!

1. Is your company ISO certified? What advantages and disadvantages are gained or lost because of being certified or not?
2. If your company is not ISO certified what quality assurance/control system do you use? How do you evaluate its effectiveness?
3. For missing documents and procedures how challenging is it to develop the existing records and systems according to the ISO standard?
4. Is there a difference in commitment and readiness on getting the business certified between the top management and the owner? If so explain difficulties faced?
5. How is quality decisions, customer requirements communicated in your business?
6. How is competence for personnel performing work affecting quality determined and evaluated?
7. Does management determine and manage work environment such as health and safety requirements, sanitation, security etc...
8. How does your organization communicate with its customer's business issues such as requirements, product information, enquiries, amendments, feed back and complaints?
9. How do you evaluate the efficiency of Quality Information the system of collecting data about quality in your business, analyzing and taking preventive and corrective actions?
10. Did you get any assistance from support agencies? In which fields? How about implementation of quality management system, ISO 9001 certification?
11. What major challenges does your business faced, experienced or anticipate in implementing ISO 9001? Please explain?
12. If you have any other comment?

