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On

"Implementing ISO 9001:2000 Quality Management  
System by Ethiopian enterprises: Opportunities and  
challenges"

Advisor

Dr. Zewdie Shibre

Researcher

Ayalneh Zerihun



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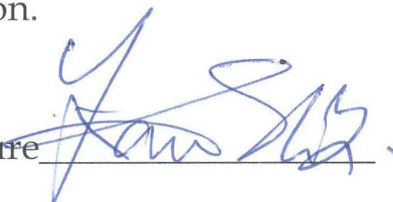
MBA  
AYA

Dr. Zewdie shibre  
Faculty of Business and Economics  
Addis Ababa University

### Approval

This is to certify that Ato Ayalnh Zerihun has completed a research paper entitled "Implementing ISO 9000: 2000 Quality Management System by Ethiopian enterprises: Opportunities and challenges" using my advise and follow up. I also approve that his work is appropriate enough to be submitted as a fulfillment of the degree in masters of business administration.

Signature



Date

April 21, 2007



**Addis Ababa University**  
**School of Graduate Studies**

Title: **Implementing ISO 9001:2000 Quality Management System by  
Ethiopian enterprises: Opportunities and challenges**

By: **Ayalneh Zerihun**  
**FBE**  
**MBA Program**

**Approved by Board of Examiners:**

*Fendie Shibre (PhD)*

Advisor

*[Handwritten Signature]*

Signature

\_\_\_\_\_  
Examiner

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Signature

\_\_\_\_\_  
Examiner

\_\_\_\_\_  
Signature

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Examiner

\_\_\_\_\_  
Signature

## Declaration

I, Ayalneh Zerihun, assert that this study entitled "Implementing ISO 9000 : 2000 Quality Management System by Ethiopian enterprises: Opportunities and challenges" is my own original work that has not been presented for a degree in any other university and all sources of material used in the study have been duly acknowledged.

Signature



Date March 20, 2007

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## Abstracts

*Quality is becoming the overriding operational priority for firms seeking to capture international market. Ethiopia is in the accession to the World Trade Organization (WTO), which will result towards an open and market led competition. To be successful, companies need to build efficient quality management practice through the implementation of ISO 9000:2000 system, which has become the "passport" to the European and other developed countries' markets.*

*This paper aimed at knowing the status of Implementation of ISO 9000:2000 Quality Management System among Ethiopian enterprises. It attempts to show the extent of quality awareness, current quality management practices, impairments for getting ISO certification and the benefits and disappointments encountered by those certified companies. It also compares the results with other countries' experiences.*

*The study found out that generally there are very few enterprises currently implementing ISO 9000:2000. However the awareness level towards quality management is high. Also, it was observed that, the level of government or other trade promotion agencies intervention in giving technical or other form of assistance is very marginal.*

*The inhibiting factors for companies towards certification are found to be cost and the difficulty of the standard to understand and implement. The cumbersome documentation and inability to change culture of people to the new system were the difficulties identified after certification.*

*This paper recommends that the level of intervention by government and trade promotion agencies towards assisting and encouraging to implement quality management has to be enhanced. Private companies should be encouraged to be established as quality consultancy and certification bodies. Companies should also strive to get certified, the sooner the better, so that they build competitive advantage and benefit from the globalized trade economy.*

# Implementing ISO 9000:2000 Quality Management System by Ethiopian Enterprises: Opportunities and challenges

## CHAPTER ONE

### 1. Introduction and statement of the problem

Due to the impact of globalization and market liberalization, quality is fast becoming one of the competitive issues since the 1990s. Nowadays, the implementation of quality initiatives can obviously bring significant improvements in productivity and competitiveness. This will affect invariably of both small and large firms with respect to getting and sustaining foreign market. ISO 9000:2000 quality management system, developed by the International Standards Organization (ISO) and total quality management (TQM) are the most popular topics in that area. ISO 9000 can be used in organizations as a route towards TQM and as a functional level strategy to improve quality and efficiency in operations.

Ethiopia is currently in the accession process to the World Trade Organization (WTO). Being a member to WTO requires the country to open up most of the sectors of the economy, and in effect, the enterprises will be faced with increased competition internationally. Firms can be successful only if they can produce quality products. The monopolistic and sheltered market conditions prevailing in developing countries has enabled large companies to continue to stay in business and earn substantial profits despite poor product quality. This makes them "complacent" and therefore unwilling to make an effort to improve quality (International Trade Centre, 1988). However, as these countries adopt increasingly liberal trade and industrial policies, domestic competition is bound to emerge. Firms that do not change their attitude towards quality will face serious threats in the long term.

All countries require imported goods to conform to the technical regulations that they apply to domestically produced products for health, safety, and consumer protection. Imported agricultural products also have to conform to sanitary and phytosanitary measures which are applied to protect human or animal life from food-borne risks and from plant-carried diseases (United Nations Conference on Trade and Development, 1993). Though these regulations and measures are applied by governments for legitimate policy reasons, they could in practice create barriers to trade. Such barriers arise if regulations differ from country to country. Exporting firms have to ensure in such situations that the products they export meet the differing requirements. This adds to their costs.

The WTO Agreement on Technical Barriers to Trade (TBT) and the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), therefore, specify that countries should base their technical regulations and sanitary and phytosanitary measures on international standards (WTO, 1995). Ethiopia must first be member of the WTO to get this advantage. Until that time, however, exporting companies have to maintain and comply with the standards of the specific countries' requirements. Moreover, since compliance with requirements laid down by technical regulations and sanitary and phytosanitary measures is mandatory, countries often require imported products to be accompanied by certificates issued by properly accredited third party conformity assessment bodies, or more typically in the case of sanitary and phytosanitary measures, certification by official bodies in the exporting country. In the Ethiopian' case, this body is the Quality and Standards Authority of Ethiopia (QSAE).

In light of the discussion about quality assurance, we may take the example of the current thriving flower business in Ethiopia. Industrialized countries such as Holland are producers of wide varieties of flowers in great volume. Their production volume, nowadays, is on the decline due to the labor costs, energy (heating) costs, land prices, greenhouse costs, etc(United Nations Conference of Trade and Development, 2003).

On the other hand, the demand for those products is still high. Many reports on the country's export performance also claim that the export of flowers is increasing each year. The European market is attractive for flowers, but at the same time it is extremely strict as regards quality. Satisfying demand in this and other developed countries markets is thus a profitable undertaking and also a challenging one.

So, due to the above reasoning, exporting companies have to meet the technical requirements for their products in their target markets. These requirements can be mandatory for requirements such as health, safety, protection of the environment, or consumer protection and are laid down in the legislation of the importing country. Adopting ISO 9000:2000 quality management will give assurance to quality of importing countries, and therefore, firms have to institute effective quality management system or strive to be certified of their processes through the ISO 9000 quality management system that have become the "passport" to the European and other developed countries' markets.

Tafessework Wondimu says that implementation of the ISO systems is a prerequisite for entry to the WTO and advises that capacity building effort should be done to setting standards for systems by enterprises (fortune, vol.8, no414, 2006). Tigineh and Berhanu also emphasize the importance of creating an enabling environment for export oriented Ethiopian enterprises to actively seek and obtain ISO certification for key products (Tigineh and Berhanu, 2001).

Another instance of export performance related to quality can be the US Africa Growth and Opportunity Act (AGOA) that provide important outlets to Ethiopian exports such as textile and apparel products with no tariff to the US market. However the report by the Ethiopian embassy in Washington about the performance of Ethiopia's export indicates that it is among the least as compared to the other countries. This is due to the inability of Ethiopian firms to meet quality standards at

reasonable price, which put them at a disadvantage position as uncompetitive as compared to other countries offered with the same opportunity.

This research commences from the proposition that, in Ethiopia, there is low level of awareness on the part of management and firms do not believe that ISO 9000 quality management system has benefits in excess of the cost to be incurred to institute or implement it. Very few companies are observed in television commercials that claim to have instituted the ISO 9000 quality management system. The study therefore aims to clarify whether those enterprises have genuine belief in the system to bring them efficiency or whether they are using it to build company image and gain short term market share.

The low level of government support in the quality effort of firms as well as the lack of sufficient intervention of trade promotion agencies and chambers of commerce are also seen as the reason for the low level of ISO 900 implementation.

There is no certifying body so far in Ethiopia of quality management system. However, there is an effort underway by the QSAE to build its capacity and get accreditation itself to be a certifying body for ISO 9000 quality management system. While many countries have certifying bodies for this purpose, the absence of one in Ethiopia will have an impact for the low level of ISO 9000 quality management implementation status in the country because firms will be forced to look for a registration body from abroad. This is an expensive undertaking and is estimated to cost them from \$5,000-\$10,000 for initial certification. The cost is an inhibiting factor especially for the smaller firms.

## **1.1 Purpose of the study**

In light of the growing need of quality management and the prevailing challenges, this study:

- Investigates the current situation on the implementation of ISO 9001:2000 among Ethiopian enterprises;
- Aims to understand the extent to which the concept of quality management is practiced by those companies;
- Explores the difficulties faced by Ethiopian enterprises before or after obtaining ISO 9000:2000 certificates , identifies benefits it brought and,
- Compares these results with those from other countries.

## **1.2 The research questions**

This research was conducted to get answers for the following questions:

- Is getting certified worth the now?
- How is the level of awareness by Ethiopian firms and management's commitment towards quality management? How many enterprises went for certification so far?
- What are the challenges for not getting certified?
- What should be done by the enterprise management, government, business promotion agencies, and other stakeholders about implementation of ISO 90900 quality management?
- What does the experience of other countries, especially those with similar level of development, looks like?

### 1.3 Significance of the study

The findings of this research will have a far-reaching importance to practitioners, organizational members, decision (policy) makers, and researchers. Specifically, the study will:-

- Help managers to look towards their system and organizations in terms of quality improvement effort;
- Initiates policy makers to think about the possible way of intervention and formulation of appropriate legislation for promoting quality at national level and will be useful input for designing technical assistance programs for trade promotion agencies; and
- Incites other researcher's to do further study on the area.

### 1.4 The research limitations

The purposive sampling procedure also decreases the generalizability of the findings to enterprises targeting local market. The sampling used gave more weight to the company's export oriented ness and the potential to supply relevant information to the study. When this study was done, the number of certified organizations were very small, which constrained the in depth research in the area. Especially, no sufficient information could be obtained to assess the pros and cons of implementing ISO 9000 in Ethiopia as sought initially.

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## CHAPTER TWO

### 2. Review of the literature

#### 2.1 Definitions of Quality

In many literatures, we commonly find the definitions of quality to have the following meanings:

- A degree of excellence
- Conformance with requirements
- The totality of characteristics of an entity that bear on its ability to satisfy stated or implied needs
- Fitness for use
- Fitness for purpose

These are just a few meanings; however, the meaning used in the context of ISO 9000 was concerned with the *totality of characteristics that satisfy needs* but in the ISO 2000 version this has changed.

Quality, as per its latest version in ISO 9000:2000, is defined as the degree to which *a set of inherent characteristics fulfils requirements* (Hoyhle, 2001). The former definition focused on an entity that was described as a product or service but with this new definition, the implication is that quality is relative to what something should be and what it is. It may be a product, service, decision, document, piece of information or any output from a process. In describing an output, we express it in terms of its characteristics. To comment on the quality of anything we need a measure of its characteristics and a basis for comparison.

So according to the definition in the ISO 9000:2000 manual, quality can be expressed as the degree to which a set of *inherent characteristics fulfils a need or expectation that is stated, generally implied or obligatory* (ISO 9000:2000 quality system manual, 2000). In this

definition we see the word "expectation". Expectations are implied needs or requirements which are taken for granted to exist. What this means is that if for instance we are regular customers of coffee and happen to go to any bar, we expect it to be hot based on our previous experience.

### **2.1.1 What is ISO 9000?**

ISO 9000 is a family of ISO standards for quality management systems. According to Jackson and Ashton, the origin of ISO 9000 lies in wartime and in the defense industry. The problem of defects in ammunition and the need for reliability in equipment, on which survival might depend, moved the focus to controlling how the work was done. Eventually this led to defined standards (eg. Defense standard 05-21) for quality management to which defense contractors were expected to work. As the concept of quality management and quality systems became known, buyers in non-defense industries started to demand that their own suppliers of technical products adopt quality systems. This led the British Standard Institute (BSI) to publish the first version of BS 5750 (revised in 1987 and 1994). A similar need for a quality system arose in many other countries and BS 5750 was taken as a model for other national standards. Eventually common European (EN 29000) and international (ISO 9000) standards were prepared.

The ISO 9000 standards are maintained by ISO and administered by accreditation and certification bodies. ISO 9000 is quite similar to ISO 14000. Both pertain to how a product is produced, rather than how it is designed. For example, ISO 216 very precisely specifies sizes of paper. ISO 9000 and ISO 14000 are more general, referring to processes, rather than any single product. ISO 9000 is intended to make sure that the product—any product—has been produced in the most efficient and effective manner possible. The standard says nothing about the particular quality of the product— in a sense of quality as excellence it may be high or low. ISO 9000 instead is a statement about how quality is managed and one implication of this is that the

products are consistently made to consistent standards whatever these standards are. In other words, ISO 9000 does not guarantee the compliance (and therefore the quality) of end products and services; rather, it certifies that consistent business processes are being applied (Jackson & Ashton, 1994).

According to the ISO survey of 2005, by the end of December 2005, at least 776,608 ISO 9001 certificates had been issued in 161 countries (<http://www.irca.org>). It can be applied by all types of organizations in areas of manufacturing, processing, servicing, printing, forestry, financial services etc. Once organizations decide to implement it for whatever motive, they will have to develop a quality management system that meets the requirements specified by ISO 9001:2000. In the course of doing so, they can consult the ISO 9000:2005 and ISO 9004:2000 guidelines. However, quality management system must meet requirements, not guidelines. It doesn't matter what size they are or what they do. It can help both product and service oriented organizations achieve standards of quality that are recognized and respected throughout the world. The International Organization for Standardization (ISO) is located in Switzerland and was established in 1947 to develop common international standards in many areas. Its members come from over 120 national standards bodies. ISO itself does not perform certification to its standards, does not issue certificates and does not control certification performed by other bodies. Its purpose is to facilitate international trade by providing a single set of standards that people everywhere would recognize and respect.

### **2.1.2. ISO 9000 Revisions**

ISO system standard has undergone various revisions. They are the following:

-ISO 9000 series of standards was first issued in 1987. It had worldwide acceptance shortly. They were core standards of the ISO 9000 system.

-The 1994 version, ISO 9000:1994, was the first revision on the basis of the experience gained during the implementation. However, this standard emphasized quality assurance via preventive actions, and continued to require evidence of compliance with documented procedures. This revision also emphasized on requirements many loads of procedure manuals and the stress on improving performance was less.

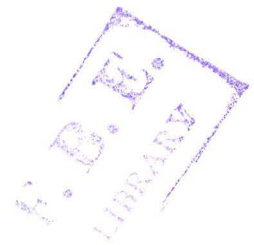
- The 2000 version, ISO 9000:2000, sought to make a radical change in thinking by actually placing the concept of process management front and centre in the Standard. The third edition makes this more visible and so reduced the emphasis on having documented procedures if clear evidence could be presented to show that the process was working well. Expectations of continual process improvement and tracking customer satisfaction were made explicit at this revision and therefore the focus shifted from documentation towards processes.

There is difference in the basis of auditing between the 1994 and the 2000 versions. The difference between the two revisions, as Hoyhle notes is that, under the 1994 version, the question was broadly "Are you doing what the manual says you should be doing?", whereas under the 2000 version, the question is more on "Will this process help you achieve your stated objectives? Is it a good process, or is there a way to do it better?" (Hoyhle, 2001).

### **2.1.3. ISO 9000:2000 Contents**

The 2000 version (ISO, 2000b) of the quality standard revised manual has the following clauses and requirements which come in Section 4 to 8:

- Section 4 is entitled General Requirements
- Section 5 is entitled Management Responsibility
- Section 6 is entitled Resource Management



-Section 7 is entitled Product Realization

-Section 8 is entitled Measurement, analysis and improvement

In each of these areas, ISO 9001:2000 seeks to set out key requirements, which if met will ensure consistency.

In the standard, there are 6 documented procedures required to be maintained for:

-Control of Documents

-Control of Records

-Internal Audits

-Control of Nonconforming Product

-Corrective Action

-Preventive Action

In addition to these, ISO 9001:2000 requires a Quality Policy and Quality Manual (which may or may not include the above documents).

#### **2.1.4 ISO 9000:2000 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. It is important to note that it is not possible to be certified to ISO 9000. Although commonly referred to as ISO 9000:2000 certifications, the actual standard to which an organization's quality management can be certified is ISO 9001:2000. Both the accreditation bodies and the certification bodies charge fees for their services. ISO requires that the certificate is not to be awarded for ever, but

must be renewed at regular intervals recommended by the certification body, usually around three years.

### **2.1.5 ISO 9000:2000 Auditing**

According to the ISO 9000:2000 ("Guidelines for selection and use"), 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). The 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 (ISO, 2000a).

### **2.1.6 ISO 9000 document components**

The latest version of ISO 9000 quality management system has three quality standards:

**-ISO 9000:2000, Quality management systems - Fundamentals and vocabulary.** It covers the basics of what quality management systems are and also contains the core language of the ISO 9000 series of standards. The latest version is ISO 9000:2005.

**-ISO 9001 Quality management systems - Requirements.** This is intended for use in any organization which designs, develops, manufactures, installs and/or services any product or provides any form of service. It provides a number of requirements which an organization needs to fulfill if it is to achieve customer satisfaction through consistent products and services which meet customer expectations. This is the only implementation for which third-party auditors may grant certifications. The latest version is ISO 9001: 2000.

### **ISO 9004 Quality management systems - Guidelines for performance**

**improvements:** It covers continual improvement. This gives you advice on what you could do to enhance a mature system.

It is important to understand that all of these are process standards (not product standards and when an organization claims to be "ISO 9000 compliant", it means that it conforms to ISO 9001.

### 2.1.7 Criticisms of ISO 9000

Many companies have found the transition to conforming to ISO 9000 difficult. Especially the magnitude of the problem in developing countries is expected to be higher. Jackson and Ashton listed some of the problems faced by enterprises after or before implementing ISO 9000 quality management systems:

- The compliance process is costly and time-consuming.
- Lots of administration is needed to implement it.
- Adhering to ISO 9000 makes processes more consistent; to some proponents of continuous improvement, it also makes it harder to improve and readapt the processes.
- It has been argued that it may not be appropriate to apply a process such as ISO 9000 to a field requiring creativity, such as software engineering.
- Many companies only register to ISO 9000 because they are forced to by the marketplace, whether or not ISO 9000 is in fact appropriate to their business (Jackson and Ashton, 1994).

The other criticism made on ISO 9001:2000 is that it does not give too much practical advice, but instead focuses on general principles. In order to create a standard applicable to almost any kind of organization, specific requirements and tools were avoided whenever possible. This is one of the reasons for the proliferation of industry-specific standards which are more practical and give clear guidance about what quality tools have to be.

## 2.2. Difference between product quality and quality management system

Since the two are different and confusing, it is worth discussing here:

**Product quality:** - an example would be a product of XYZ Company producing corrugated iron sheet of .25mm thick. The factory may be granted by the Quality and Standards Authority of Ethiopia (QSAE) to use the latter's stamp in its products. This will show that the product conforms to the standard of the identified specification. The QSAE will make sample survey at open market such as Markato and check whether the .25mm sheets are as per the specifications marked on the product. If the quality check doesn't conform to the standard, the authority will withdraw the use of seal by the manufacturer and a suit may be filed for the fraudulent practice. Its trade license can also be cancelled by an appropriate authority.

**Quality management system:** on the other hand is a system which defines the method of managing quality in a company to ensure that products conform to the quality level that it has set for itself. A company is free to set any quality standard for its products on the basis of marketing considerations and customer requirements. A quality-system standard helps the company to plan and consistently achieve the requisite product quality standard. Hence ISO 9000 is a process management and not a product standard.

## 2.3 Benefits of Implementing the Quality System

There are numerous reasons why many companies in other countries are now developing their quality systems to the requirements of the standard. They are to:

- Reduce first time failure;
- Reduce the costs of customer claims;
- Get things right the first time;

-Improve service to the customer and to increase competitiveness.

-To reduce the need for customer-supplier demonstrations of quality assurance procedures by introducing a third-party quality assurance certificate.

-Pressure from large customers.

-To maintain contracts with existing customers etc.

ISO 9000 standard is an effective tool to provide controls to ensure quality of production and delivery and reduce waste, downtime, and labor inefficiencies thereby increasing productivity. It is beneficial to developing countries companies both small and large. John and Andy found in their study that the business benefits of ISO 9000 registration for a small company is the same as for a large company (John and Andy, 1997). Since small enterprises contribute the major proportion in developing countries, ISO 9000 will have much relevance to small firms in Ethiopia.

## CHAPTER THREE

### 3. Research procedures and methods

This study is exploratory in nature and used both primary and secondary data to get the required information. Secondary resources, such as the internet, various management and academic journal articles and surveys were used for the study.

#### 3.1 The Sample design

A questionnaire survey was conducted, during the month of February 2007, among manufacturing, agricultural, construction and service enterprises to collect primary data. The questionnaire was based on an extensive literature review of the current quality management.

The survey initially covered a total of 56 chosen companies among the enterprises listed under the current business directory of the Addis Ababa Chamber of Commerce (2006-2007). 16 companies filled and returned questionnaire delivered by data collector. This signifies 28% response rate. Since interpretation of the implementation status can be improved by having as large survey as possible, further 50 companies were selected using the same selection technique and this made overall surveyed companies to 106. The same questionnaire was mailed to the latter selected 50 companies through post office by accessing their mail addresses from the trade directory. Covering letter by the researcher as well as another letter of cooperation by the coordinator of the office of master of business administration (MBA) accompanied each questionnaire delivered to surveyed companies. The mail survey resulted 8 responses which make up the total available response for analysis into 24. The sample frame has a total of 1261 enterprises all together who are members of the chamber. The selection was based by giving more weight on the company's export oriented ness, and the organization's potential to supply information relevant to the study.

### 3.2 Data collection strategy

Data collection and analysis has been carried out using formats and statistical tables developed for use to facilitate the analysis of data such as for collecting and summarizing information regarding company profile, quality awareness, quality management practice, and quality management support by other stakeholders. About 25 questions requiring a mix of quantitative and qualitative responses was administered in the survey. Relevant comments made by the interviewees on each of the issues addressed were recorded and placed in a separate file and referred during the analysis. The general types of questions addressed in the questionnaire are shown on table I.

**Table I: General contents of the questionnaire**

Section	Addressed Issues
1	Company information: capital, number of employees and composition of its exports.
2	Current quality management practices: awareness of management about quality and the use of quality instruments
3	Status of ISO management implementation: impairments ,benefits and disappointments after implementation.
4	Support services about implementation from government, trade promotion agencies or other stakeholders.

Both qualitative and quantitative data was collected with the assistance of a data collector under the guidance of the main researcher. Data collector, a diploma graduate in the field of marketing was hired and was given about two days training about the whole process of data collection procedures and methods before participating in the survey.

The quantitative responses were transformed into coded numerical data and directly entered into the database. The qualitative comments were also placed in groups, then numerically encoded and entered into the database.

### **3.3 Data analysis**

Analysis was made with the aid of software packages referred to as spreadsheet and Statistical Package for Social Sciences (SPSS). The analytical framework was dictated by the basic objective of the study: to identify constraints for instituting quality management; to know the present quality exercise and awareness of quality among managers and enterprises in Ethiopia and to develop effective channel for providing technical assistance intervention to exporting companies.

## CHAPTER FOUR

### 4. ANALYSIS AND GENERAL DISCUSSIONS OF FINDINGS

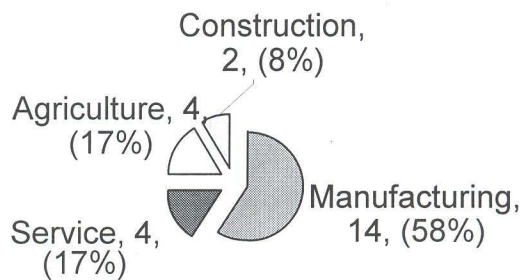
#### 4.1 General profiles of the respondents

Breakdown of the respondents into industry types and by size are shown in the pie charts below, exhibit 1 and 2 respectively.

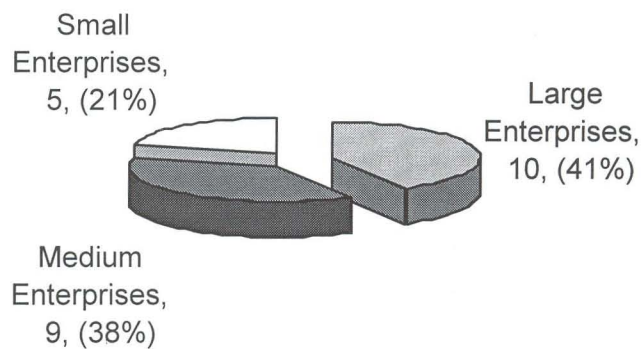
Regarding the type of industry, 14 companies (58%) which constituted the majority belonged to the manufacturing industry, 4 (17%) belonged to the service sector, 4 (17%) companies are from the agriculture sector and the rest 2(8%) are from the construction sector.

Among the general 24 respondent companies 10(41%) of them employed more than 500 employees. This constitutes the largest proportion of respondents and it is categorized as large organizations. The other 9 respondent companies (38%) employ between 100 and 500 employees classified as medium sized enterprises and the remaining 5 firms (21%) were from the small organization classification (Exhibit 2).

**EXhibit: 1 Respondent company by type of industry**



### Respondent companies by size



When asked about their export performance under section one of the questionnaire, 11 companies (45%) stated that they had export sales. The average of the percentage of export in total sales was found to be 25 per cent. Table II describes the export component of those respondent companies.

**Table II: Components of external sales**

Percentage of export sales	Number of companies	Explanation
0% (no export)	9	Out of the 24 respondent companies 9 have no export sales
0%-25%	6	Out of 24 companies 6 have up to 25% export sales
26%-50%	3	
51%-75%	5	
76%-100%	1	
<b>Total surveyed</b>	<b>24</b>	

Note: Average export sales is 25%, calculated by dividing range in to two and multiplying by frequency and then dividing by 24.

#### 4.2 Management awareness of quality and current quality management practices

According to Keki R. Bhote, organizations undergo a series of four stages in quality management. The infrastructure that a company must construct in order to aspire to world-class quality or total quality management can best be described in a four-stage progression. A company in stage 1, called the stage of innocence, is in the "Dark Ages" of quality consciousness. In Stage 2, called the awakening stage, a company recognizes the importance of quality but works without a firm plan. In stage 3, the stage of commitment and implementation, a company has established an infrastructure leading to world class quality. Finally, a company in Stage 4, called world class, has become a benchmark company. So to elevate the company as rapidly as possible to stages 3 and 4, companies have to do activities under the general classification of the following areas: management, organization, systems, measurement, tools, customers, design, suppliers, process/ manufacturing, field, support services, and employees. Under each of the 12 areas specific quality management tools exist. For instance, quality planning comes under management, appropriate structure, style; role of quality professional comes under organizational structure. Systems should encompass quality audits and data collection. Tools should incorporate the application of statistical process control (SPC), meeting customer requirement, equipment maintenance and support activities (Keki, 1991).

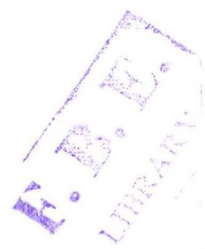
Based on Keki's framework, the questionnaires in section 2 from 1 to 9 asked about the existence of the appropriate quality control practice to meet the ultimate quality goal. Companies are expected to pass the stage 1 (innocence) stage. Stage 2 and stage 3 companies are expected to exercise implementation of the ISO 9000 quality management system or, in the case of other countries where there is quality award institutions, they aspire to meet guidelines and get quality awards such as the Malcolm Baldrige award( in the USA) or the Demming prize in Japan. Table III shows the assessment of the current practices in the Ethiopian enterprises based on the responses of companies.

**Table III: Status of quality management practices**

Type of quality management practice	Number of companies and their response to the question			Total respondents
	Not applicable	yes	No	
Does the company measure external customer satisfaction?		6	18	24
Does quality audit exist?		4	20	24
Does the company use statistical process control?	5	9	10	24
Does the company has guidelines for equipment maintenance?		18	6	24
Does quality control, in terms of raw materials, in process material or end products, exist?	3	10	11	24
Does quality control facility, in the form of inspection, laboratory, in-house expert or documentation, exist?	3	10	11	24

The findings of this study indicates that although there are very few certified companies in Ethiopia, the race to quality and the awareness level among management is high. As indicated in the table III, 6 company's measure external customer satisfaction level; 9 companies have statistical process control mechanism, and 18 companies have guidelines equipment maintenance for diagnosis and repair. The same way among the 24 companies surveyed 10 (42%) companies have internal quality control facility in the form of Inspection, laboratory, documentation and in-house expert.

Those initial quality control tools are the phases in the road map progression towards using high level of quality management systems such as ISO 9000 and Total Quality



Management (TQM). This indicates that there exists high level of awareness and readiness towards quality management among the Ethiopian enterprises.

Respondent companies were also asked to rate in terms of importance of factors constraining their export performance on a five- point Likert-type scale ranging from 5(highly problematic) to 1(little problematic).

Since 13 companies have no export sales, the response was given by the rest 11 companies to this question and their response, in terms of mean score and standard deviation is highlighted on table IV. It also ranks ordered responses. The bracketed figures represent the mean scores. It is understood that the most important factor affecting export performance, based on their response, is quality management. This also reinforces the conclusion that companies attach high regard to quality management and recognize the impact it has on their foreign trade performance.

**Table IV: Factors constraining export performance**

<b>Perceived factors that are hard to meet to affect export performance</b>	<b>M<sup>1</sup></b>	<b>SD<sup>2</sup></b>
Quality management	4.63	1.56
Technology	4.27	1.5
Finance	3.72	1.44
Inputs	3.18	1.41
Labor	2.90	1.41
Packaging	2.81	1.41
Notes: <sup>1</sup> The mean score is based on participants' level of agreement with each statement on a scale of 1=little problematic to 5=highly problematic. A mean score above 4 indicates high, between 3 and 4 indicates moderate and a score less than 3 indicates a low level of agreement.. <sup>2</sup> SD = Standard deviation		

### 4.3 Implementation of ISO 9000 among Ethiopian enterprises

This study is primarily aimed to find out where the Ethiopian companies are in the implementation of the standard. To collect the required data, companies were asked whether they have implemented ISO 9000. It was found that only 3 companies out of 24 respondents stated that they have already had ISO 2001:2000 quality management system. So the rest 21 are not implementing it. This constitutes a low rate of implementation which is 12.5 per cent. The status of companies with regard to implementation of ISO 9000 is indicated on table V.

When the number of certified companies was assessed by size and industry type, all the three were found to belong to the large organizations. All of them were also found to be in the manufacturing sector. This indicates that, although the contribution of the small firms to the Ethiopian economy is substantial and despite the belief that the certification has the same benefit both to large and small organizations, there was not even a single small firm found certified in this survey.

From table V, it is evident that, of the 21 companies who are not certified currently, 10 companies said that they are at the preparation stage. The preparation stage takes time. It requires the establishment of appropriate records, procedures, and systems for pre-assessment and evaluation by auditors of the certifying bodies. The existence of 10 companies at the preparation stage, out of the 21 non-implementing companies (48%), shows that, contrary to the hypothesis made earlier, there is a high level of awareness about ISO 9000 among enterprises management in Ethiopia. But the low level of implementation happens to be due to cost factor, as to be discussed in the coming sections.

In this survey, it was also found that there are 3 companies who claim to have received technical and financial proposals from certifying bodies and are reviewing the feasibility. Furthermore, 2 other companies said, under the comments section, that

they wish if they could get a legitimate body which can assist and offer them reasonable price for instituting and certifying them. This comment supports the initial hypothesis of this research that the unavailability of consulting or certifying body locally with regard to quality is a mitigating factor for the low pace of ISO 9000 certification process in Ethiopia.

**Table V: ISO 9000 implementation status**

<b>Companies</b>	<b>Number of companies</b>	<b>%</b>
Not implementing ISO 9000:2000	11	45.8
Under preparation	10	41.7
Implementing ISO 9000:2000	3	12.5
<b>Total surveyed companies</b>	<b>24</b>	<b>100</b>

As can be seen from the annexed annual ISO survey of 2004, the certification statistics of Ethiopian firms is strikingly very low; only 2 firms were certified until the end of December 2004. This is one of the lowest even by the African standard. The neighboring Sudan had 118 firms and Zimbabwe had 109 companies who got certified then. Similarly, Kenya, Algeria, Egypt and South Africa were among the highest certified group with 158, 126, 810, and 2486 companies having ISO 9001:2000 certificates respectively as at December, 2004.

#### **4.4 Opportunities and challenges before and after the certification**

##### **4.4.1 Inhibiting factors**

To assess the mitigating factors for not implementing ISO 9000 in Ethiopia, respondents were asked to state the cause for not instituting the system so far. According to the literature, ISO certification is too expensive, time consuming and too formalized. Cost of obtaining is even more inhibiting when it comes to smaller firms.

Respondent companies have given various reasons as listed in decreasing order of intensity on table VI. The most frequently faced difficulty which hampers the certification process was found to be high cost of certification or unavailability of budget, followed by difficulty to understand and implement the ISO 9000 system.

**Table VI: Impairments for implementation of ISO 9000**

Rank	Number of firms which said this is an impairment
1	Cost of registration 18 out of 24
2	Difficult to understand and implement the system 15 out of 24
3	Assistance not available 10 out of 24
4	Management doesn't have familiarity or knowledge about ISO 9 out of 24
5	No competent employees to implement it 8 out of 24

**Note:** - since the firms can face more than one obstacle at the same time,  
the sum of the numbers is greater than the total number of respondents.

#### 4.4.2 Benefits after implementing ISO 9000

Major reason for seeking ISO 9000 certification among Ethiopian enterprises is found to be related to sales and marketing. As number of certified companies is low, companies aim to attain competitive advantage by gaining more market share, and also want to build public image through it. The three certified companies were asked to state what benefits the implementation of the ISO 9000 brought them with regard to processes, costs, marketing, employees, or customer's satisfaction level. All the three companies believe that their certification contributed to the increase in their market

share and company image. This can be considered as the motivation for seeking the certification in the first place. One of them, in addition to the above benefits, said that the system also improved the quality of production process and reduced the number of rework significantly.

#### **4.4.3 Difficulties observed after registration**

Another question was asked to clarify the disappointments after being certified. The most difficulties encountered after registration as stated by those 3 certified companies is that firstly all of them believe that the requirement of the standard has brought them with cumbersome documentation and secondly they stated that there is problem to understand the standardization among employees. The other disappointment which two of the certified companies mentioned was that they have faced with difficulty of changing the existing system and culture of the organization towards the new system. Although there might be other problems like cost of maintaining the system, especially if the smaller firms were involved, hence caution should be taken in that one may not claim these to be the only difficulties that apply to many enterprises in Ethiopia. Hence to come up with concrete conclusion, larger sample has to be taken in the future as more firms become certified.

#### **4.5 Support activities**

Section 4 of the questionnaire asked to determine the level of technical support services provided to enterprises. They were asked whether they have received training and/or technical assistance regarding quality management.

From the respondent's answers, as shown on table VII, there is no significant intervention from either the government or trade promotion agencies to build awareness of quality management among enterprises in Ethiopia. 8 out of 24 respondents said they didn't receive any kind of training or assistance. The rest 16 said that they have received short term training, from institutions like Ethiopian management institute (EMI), the Addis Ababa Chamber of Commerce, the Quality

and Standards Authority of Ethiopia (QSAE), the United Nation Industrial Development Organization (UNIDO), Institute of Quality management (IQM) etc. Only 4 companies said that they have got outside technical assistance and sought consultancy services. The level of support provided to firms is, therefore, very low and hence it should be enhanced by the government and other stakeholders.

**Table VII: Support services**

Question	Number of companies who responded		Total
	Yes	No	
Have you ever received external training, technical support from government and trade promotion agencies?	16	8	24
Did you get outside technical support from any stakeholder regarding quality management?	4	20	24
Did you receive outside consultancy service regarding quality?	4	20	24

Another question was posed with regard to knowing the level of support activities. When companies were asked to tell the most important sources of their market information, 18 companies (75%) said that they rely on their personal and trade contacts, and only 6 companies (20%) indicated that they obtain some market information from support agencies such as the Ethiopian trade point and the Addis Ababa chamber of commerce and sartorial associations. This indicates that agencies, government, and other stakeholders' intervention is minimum.

In general, therefore, technical issues (high implementation costs, inadequate resources, and insufficient external assistance) are cited to be major reasons. Hence

cost effective and well planned implementation process should be in place. Besides this, the government and trade promotion agencies should extend the required technical assistance for effective implementation. The government should also give special support to small enterprises in line with industrial strategy as the certification is going to improve their operations.

B. E.  
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## CHAPTER FIVE

### 5. CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this research and the general discussions so far, the following recommendations are made to the government, enterprises management and various stakeholders:

Some developing countries have designed their national standards organizations as certification bodies and a number of certification bodies based in Europe also operate in developing countries on a commercial basis (ITC, 1998). In south East Asian countries like Hong Kong, Malaysia and Singapore, the government has set up special divisions to help industries to go for ISO 9000 accreditation (Samuel, 1994). This practice should be in place in Ethiopia so that awareness about quality management can be implanted among firms so that they become competitive in international arena. Currently, the QSAE is in the process of getting accreditation for itself to be a certifying organization. It is building its capacity through the assistance of a German accreditation body called "German Association for Accreditation" (fortune, Vol.7N0. 354, 2007). It is expected that private firms may also follow suit in the meantime or afterwards.

This effort should be encouraged and supported by the government and the chamber of commerce so that more private firms established and become as recognized registrars and consultancy services in the area of quality management systems to serve as registrars to organizations seeking ISO certification. This will disseminate the quality effort widely across firms and mitigate the cost factor in getting certification from foreign certifying firms.

The QSAE should aspire to be an accreditation body beyond its current plan to be a certifying body. It must be able to qualify for Quality System Assessment Recognition (QSAR) membership and therefore to ensure worldwide acceptability for ISO 9000 certificates issued under it. QSAR is a scheme established by ISO and its partner IEC( the international Electro technical Commission) to ensure worldwide acceptance

of ISO 9000 certificates issued by any certification body approved under the scheme (ITC, 1998). To oversee and operate the scheme, a joint ISO/IEC QSAR board has been set up. The QSAR secretariat is based at the ISO central secretariat in Geneva, Switzerland. The scheme provides for the national or regional assessment of accreditation bodies against criteria from the relevant ISO/IEC guides on conformity assessment activities.

Since the government policy promotes export oriented industrialization, certification to ISO 9000 quality management system can be a useful tool for exporting companies. The government, however, should see to it that only deserving companies are certified. To have this, the government, in cooperation with industrial associations, must first assist the establishment of accreditation bodies through the setting up of institutional mechanism for the accreditation and effective monitoring of certification agencies.

Another major requirement for the effective implementation and certification of quality systems based on ISO 9000 is the provision of good educational facilities for training industry personnel and quality consultants in implementation methodology. In general the government should set up a suitable institutional infrastructure for the following activities:

- Creating awareness about quality and its economic benefits
- promoting new concepts in quality management, including ISO 9000;
- Training industry personnel in quality related subjects, ISO 9000 standards and the auditing of quality systems;
- Accrediting certification bodies;
- registering certified auditors for quality systems.

Although major initiative should be taken by the government in the above major areas, the institutional setup should not fall under its ministry. It has to be established with active participation of the private sector and be autonomous and free from any bureaucratic control. It should also be staffed with personnel of high professional competence to ensure the effectiveness and credibility of the ISO 9000 certification system in international markets.

Analysis of literature review and the survey of ISO implementation status of other countries suggest that it is high time for the Ethiopian enterprises got the certification. The analysis of the current international trade and globalization, the strict quality requirement of customers of the first world and the benefit the system brings in terms of efficiency and ability to bring about long term competitiveness, reveals that it is worthwhile to actively seek certification. "China, which recently joined the WTO, and countries that aspire to join the European Union (EU), are experiencing major growth in certification", says the ISO survey of 2003. Since Ethiopia is in the accession to the world trade organization, the need for membership should accelerate the quality improvement effort which is done through employment of the ISO 9000 quality management system.

For enterprises' management, the message is this: The ISO 9000 series is perceived as a powerful tool for effective quality management and for achieving greater customer satisfaction. The standard improves the operational efficiency of enterprises, enabling them to provide a better quality of goods and services at lower cost, and thereby to meet the challenge of increasing competition in global markets. The standard especially helps to meet requirements for export trade and access the sophisticate markets in Europe and North America. Hence we can conclude that ISO 9000 is one of the important operational strategic tools that should be employed to increase efficiency and build competitive advantage.

ISO 9000 is being used throughout the world, where many thousands of companies are implementing it. Moreover the globalization of trade has integrated markets and hence the Ethiopian enterprises cannot isolate themselves from this trend.

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# Attachments

F. D. E.  
STRABY

# ISO 9001:2000 certifications worldwide

Growth from end of 2001 to end of 2004

Africa / West Asia	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Afghanistan	1			3
Algeria	6	16	43	126
Angola		5	1	2
Bahrain	3	2	30	99
Bangladesh		6	49	182
Benin				1
Botswana		2	11	8
Cameroon			2	9
Central African Rep.				212
Côte d'Ivoire		4	9	
Egypt	18	222	754	810
Ethiopia				2
Gabon		1	2	3
Ghana			9	17
India	544	2 247	8 367	12 558
Iran	37	16	470	3 000
Israel	33	408	5 019	7 280
Jordan		34	112	278
Kenya	8	11	29	158
Kuwait	11	7	25	101
Lebanon	14	27	62	154
Libyan Arab Jamihiriya	1	2	4	6
Madagascar				3
Malawi		2	6	2
Maldives			1	1
Mauritius	3	32	93	212
Morocco	14	46	64	296
Mozambique		2	3	9
Namibia			15	23

Africa/West Asia	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Nigeria		3	49	99
Oman	25	32	86	250
Pakistan	96	186	464	695
Palestine		13	18	29
Qatar	13	11	17	94
Rwanda				1
Saudi Arabia	6	131	247	394
Senegal		9	10	29
Seychelles		2	4	9
South Africa	87	401	2 356	2 486
Sri Lanka	1	34	90	148
Sudan	2	9	26	118
Swaziland		8	17	13
Syrian Arab Rep.	4	38	215	240
Tanzania			2	5
Tunisia	10	30	119	123
Uganda	7	31	120	47
United Arab Emirates	112	407	892	819
Yemen		4	6	29
Zambia		1	11	17
Zimbabwe	2	2	14	109

Total				
Africa/West Asia	1 058	4 444	19 943	31 309
Share in percent	2,39	2,66	4,01	4,67
No. of countries/economies	25	39	44	49

## ISO 9001:2000 certifications worldwide (continued)

Central and South America	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Argentina	203	710	1 790	4 149
Bahamas				5
Barbados			8	11
Belize	2	2	2	
Bermuda			1	1
Bolivia		10	40	88
Brazil	182	1 582	4 012	6 120
Cayman Islands (United Kingdom)			1	1
Chile	15	92	340	924
Colombia	87	728	2 222	4 120
Costa Rica	5	23	63	105
Cuba		3	3	218
Dominican Rep.			1	22
Ecuador	2	8	29	57
El Salvador	1	3	7	34
Grenada			1	1
Guatemala	3	7	18	25
Guyana		1	3	11
Honduras		5	9	9
Jamaica	1	1	3	12
Netherlands Antilles (NL)		1	35	38
Nicaragua		6	9	28
Panama	4	13	44	69
Paraguay	4	21	37	44
Peru	16	82	141	205
Puerto Rico		2	26	33
Saint Lucia			4	2
Surinam			1	
Trinidad/Tobago		6	52	60
Uruguay	41	116	200	325
Venezuela	14	47	201	299

## Total

Central and South America	580	3 475	9 303	17 016
Share in percent	1,31	2,08	1,87	2,54
No. of countries/Economies	15	24	30	29

## North America \*

	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Canada *	704	2 125	8 454	9 286
Mexico *	79	265	1 437	3 391
USA *	1 104	4 587	30 294	37 285

## Total

North America *	1 887	6 977	40 185	49 962
Share in percent	4,26	4,18	8,07	7,45
No. of countries/Economies	3	3	3	3

\* Data received from Quality Systems Update

Europe	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Albania		1	2	6
Andorra		3	1	1
Armenia		1	16	26
Austria	700	1 879	2 809	3 839
Azerbaijan			2	203
Belarus		16	102	447
Belgium	119	1 285	3 167	4 471
Bosnia and Herzegovina	1	8	47	209
Bulgaria	38	246	842	1 685
Croatia	30	194	580	966
Cyprus	10	160	314	573
Czech Rep.	320	1 125	2 565	10 781
Denmark	36	447	935	1 050
Estonia	66	167	261	438
Finland	282	643	1 861	1 784
France	2 194	6 529	15 073	27 101
Georgia		3	7	20
Germany	2 338	10 811	23 598	26 654
Gibraltar (United Kingdom)		1	28	47
Greece	31	540	1 615	2 572
Hungary	1 349	4 446	7 750	10 207
Iceland		6	25	28
Ireland	248	494	1 132	1 683
Italy	1 974	14 733	64 120	84 485
Kazakhstan	21	16	174	229
Kyrgyzstan		4	5	6
Latvia	15	33	73	484
Liechtenstein	14	38	69	71
Lithuania	29	158	324	487
Luxembourg	5	41	110	108
Malta	25	122	204	230
Moldova		6	16	26

Europe	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Monaco		5	45	22
Netherlands	750	2 803	9 917	6 402
Norway	75	405	1 171	1 368
Poland	232	914	3 216	5 753
Portugal	188	965	3 417	4 733
Romania	87	767	2 052	5 183
Russian Federation	35	314	962	3 816
San Marino, Rep of				18
Serbia and Montenegro			103	696
Slovakia	144	768	1 148	2 008
Slovenia	34	330	465	1 811
Spain	808	8 872	31 836	40 972
Sweden	145	833	3 107	4 687
Switzerland	1 931	5 060	8 300	11 549
The Former Yugoslav Rep. of Macedonia	1	7	47	133
Turkey	72	911	3 248	5 009
Ukraine	26	181	308	934
United Kingdom	8 501	9 301	45 465	50 884
Uzbekistan			2	

Total				
Europe	22 888	76 678	242 636	326 895
Share in percent	51,57	45,86	48,73	48,76
No. of countries/economies	38	48	50	50

## ISO 9001:2000 certifications worldwide (continued)

Far East	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Brunei Darussalam	4	13	36	46
Cambodia		5	5	5
China	7 413	40 997	96 715	132 926
Hong Kong, China	547	1 338	2 683	3 252
Macau, China	6	10	58	80
Chinese Taipei	634	1 316	2 991	5 676
Fiji	2	2	2	2
Indonesia	161	308	1 318	3 134
Japan	3 650	16 813	38 751	48 989
Korea, Democratic People's	106	130	63	1 352
Korea, Republic of	1 156	2 942	10 640	12 416
Malaysia	257	1 119	3 076	4 337
Mongolia		1	4	7
Myanmar			3	346
Nepal		4	6	25
Papua New Guinea				1
Philippines	43	270	456	1 108
Singapore	333	1 953	3 341	3 964
Thailand	89	938	1 675	5 955
Tuvalu			1	1
Vietnam	33	354	1 237	1 598

Total				
Far East	14 434	68 513	163 061	225 220
Share in percent	32,52	40,98	32,75	33,60
No. of countries/economies	15	18	20	21

Australia / New Zealand	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
Australia	3 442	7 024	19 975	17 365
New Zealand	99	99	2 816	2 632

Total				
Australia / New Zealand	3 541	7 123	22 791	19 997
Share in percent	7,98	4,26	4,58	2,98
No. of countries/economies	2	2	2	2

## ISO 9001:2000 certifications

World results	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004
World total	44 388	167 210	497 919	670 399
World growth		122 822	330 709	172 480
Number of countries/economies	98	134	149	154



Ref No. FBE/MBA/112/99

Date: Feb 1, 2007

To: \_\_\_\_\_

Addis Ababa

Dear Sirs;

As you may be aware the faculty of Business and Economics at Addis Ababa University offers master of business administration (MBA) programe. We at the faculty believe that this programe will have significant contribution towards meeting the demand for highly trained managers in organizations like yours.

Our students take a number of carefully selected courses over a period of 2 years before they graduate. However since we believe that course work alone will not be enough to produce business graduates of higher caliber, we also require our students to identify specific local organizations and work on practical managerial problems. From our experience, many local organizations have worked with us in terms of offering accesses to such real and possible problems.

In this spirit, **Ayalneh Zerihun** who is one of our MBA students has selected your organization as one Sample Company to conduct survey for his work in the topic of "Implementation of ISO 9000:2000 quality management practice among Ethiopian enterprises."

This is therefore to kindly request you to extend the student the necessary cooperation to realize his objective. At the culmination of the research work, we will send you a copy of the student's report for your file.

We are confident that you will appreciate the merit of such an approach in training our MBA students some of whom may eventually work for your organization.

With Best Regards,

Teshome Bekele( Ato)  
Coordinator MBA programe



Date: January 28, 2006

To:

Dear Sirs;

The purpose of this questionnaire is to collect data for a research project "Implementing ISO 9000:2000 quality management systems among Ethiopian enterprises". This is an independent research conducted for the partial fulfillment of the master's degree in business administration (MBA) by a prospective graduate student from Addis Ababa University.

The findings of the research are intended to communicate problem areas of the implementation process of ISO 9000 quality management systems to the management and provide recommendations for better quality management in the Ethiopian enterprises. Please respond to each question by providing a short answer and/or putting a tick mark ( ) in the blank spaces provided to that of your choice. Please use the back pages if you need more spaces to answer the open ended questions.

Your answer and participation is very important. You are kindly requested to respond as thoughtfully and frankly as possible and all your information will be kept and treated most secretly and confidentially.

I appreciate if you could help me expedite the data collection by completing and sending back the questionnaire as soon as possible through my postal address (Ayalneh Zerihun, P.O.Box: 23040) or by calling me to your office to collect it myself, whichever is convenient to you. Thank you in advance for your understanding and cooperation. If you have any queries, please contact me at **091 140 78 47** or e-mail: [ayalzeri@yahoo.com](mailto:ayalzeri@yahoo.com).

Yours faithfully,

Ayalneh Zerihun

**Part A: Company information and personal data of the respondent**

Name of company \_\_\_\_\_

1. Position of the person filling this questionnaire \_\_\_\_\_

2. Experience with the company(years of service) \_\_\_\_\_

3. Educational level \_\_\_\_\_

4. Amount of company's capital in Birr

Up to 200,000

200000-500,000

500,000-1million

1 million and above

5. Number of employees

<100

100-500

500 and above

6. Components of external sales (exports)

0% (no export)

0%-25%

25%-50%

51%-75%

76%-100%

100%

**Definitions for the term used in this survey:**

**Quality management:** - is the overall management function that determines the quality policy, objectives and responsibilities, and implement them by means such as quality planning, quality control, quality assurance and quality improvement within the quality system.

**ISO 9000:-** is a standard developed by the international standards organization (ISO) to make sure that the product—any product—has been produced is in the most efficient and effective manner possible. ISO 9000 does not guarantee the compliance (and therefore the quality) of end products and services; rather, it certifies that consistent business processes are being applied.

**Part B: Quality management practices**

1. How is quality audits practiced in the organization?

- Quality audit is not practiced currently
- Done by a quality professional
- Done by external examiners
- Done by top management

2 Does the organization use survey to measure external customers' satisfaction?

Yes  No

3. Is cost of quality measured?

- Yes, it is gathered and analyzed
- Yes, analyzed and reduced up to a certain target
- No

4 Statistical process control (SPC)

- Not applicable
- Doesn't exist
- Done through control charts

5. Equipment maintenance:-

- Is fixed when broken
- There is a guideline to reduce diagnosis and repair time
- Operator maintenance system in place
- Total productive maintenance (TPM) employed

6. Do you have internal quality control facility in the form of:

- Inspection? \_\_\_\_ yes  No   
Laboratory? \_\_\_\_\_ Yes  No   
Documentation? \_\_\_\_ Yes  No   
In-house expert? \_\_\_\_ Yes  No

7. Aside from internal facilities, do you have access to external services for quality control?

For raw materials Yes  No

(have access to facilities for the preparation of proper specification for inputs and for testing their conformance)

For in-process materials \_\_\_\_ Yes  No

For end-products \_\_\_\_\_ Yes  No

8. How do you rate meeting quality standard as a competitive strategic choice to the success of your business?

Very decisive

Moderately decisive

Fairly important

No different from other priorities such as cost reduction or customer responsiveness

9. To what extent are the following factors constraining you in your export operation? (Rate from little problematic(1)....to.. Highly problematic (5))

Not applicable

Technology

Quality management

Labour

Finance

Inputs

Packaging

**Part 3: Status of ISO 9000 management Implementation**

1 Where is your organization in terms of implementing ISO 9000:2000?

Not implementing

Preparing

Implementing

2 Which quality management effort or practice exists in your organization, other than ISO 9000?

Quality circles

Total Quality management

Other

3 If your organization didn't get certified so far, what are the reasons for not doing so?

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4. If your organization is ISO 9000 certified, what problems or difficulties you encountered during the registration process?

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5 If your organization is already implementing ISO 9000 quality management system, what problems or disappointments you encountered afterwards?

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6 After implementing ISO 9000 quality management system, what benefits you observe regarding processes, costs, marketing ,employees or customers satisfaction level?

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7. Any other comments you may have

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**Part 4: Support activities**

1. Have you ever been offered training/advice/advocacy service regarding quality management from government office, chamber of commerce or any other trade promotion agency?

Yes  No

If yes, please indicate by whom and how often \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Have you used the services of a private advisory or consulting agency?

Yes  No

3. What are your 3 most important sources of market information?

Trade contacts

Journals/databases

Support agencies (such as Ethiopia trade Pont)

Trade promotion organizations (such as the chamber of commerce)

Personal contacts

Company's website

Others if any \_\_\_\_\_

4. Which of the following would you say are major marketing constraints in the target market, especially foreign market?

Not applicable

Tariff barriers

Non-tariff barriers such as meeting strict quality and physosanitary requirements by importing country

Unavailability of distribution system

Lack of information