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INFORMATION SUPPORT SYSTEM FOR IMPORT AND EXPORT IN ETHIOPIA

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT  
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BY

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Information Support System for Export and Import in Ethiopia

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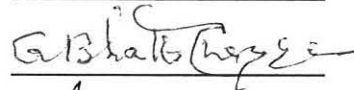
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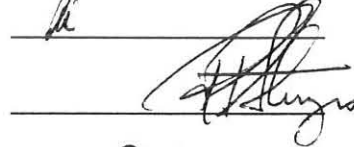
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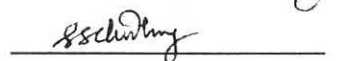
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## DEDICATION

To my Parents, to whom I owe every thing that I claim to be mine.

## ABSTRACT

This study has been carried out to design and develop an information support system for export and import in Ethiopia. It is to provide different items of information needed by the different user groups as per their requirement. The design of the system has been preceded by a survey conducted to collect information about the following: (1) The prospective users of export and import Information; (2) the different types of information needed by these groups of users; (3) the purposes for which these items of information are required; (4) the different sources of export and import information; and (5) the existing available trade information service units and the types of information service rendered by these units. The provisions of the Ethiopian National Information Policy have been taken note of. The trade information infrastructure of the country has been reviewed in the light of the provisions of the national information policy to recognize its inadequacy. For the purpose of collecting information, methods, such as, questionnaire method, interview method, observation method, and literature survey, have been used. The study reveals that the existing trade information service units are neither adequately resourceful; nor are they well organized. In general, the performance of these trade information service units is not at all satisfactory according to their users. Those service units are all under-utilized because of their inadequate in all respects. Being in conformity with the expectations of the national information policy, a computer based information services system for export and import in Ethiopia has been proposed. The system is to be located in the information service unit of the Ministry of Trade, to start with. In the long run the system would function as a network. All the important trade information service units of the country would function as nodes of this network. For the proposed system to be operative, it would be necessary for certain essential development to take place mostly through the necessary initiatives of the Government of Ethiopia. The recommendation of this study cover all those essential development.

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## LIST OF ABBREVIATIONS

AACC	Addis Ababa Chamber of Commerce
AAU	Addis Ababa University
CBR	Crude Birth Rate
CISS	Computer-based Information Support System
COMESA	Common Market for East and South Africa
CSA	Central Statistical Authority
DPDD	Data Processing and Disseminating Division of MOT EAL Ethiopian Airlines
ECA	Economic Commission of Africa
EEC	European Economic Community
EIISE	Export-Import Information System for Ethiopia
ESA	Ethiopian Standardization Authority
ESL	Ethiopian Shipping Lines
ETC	Ethiopian Chamber of Commerce
ETD	Ethiopian Trade Directory
ETJ	Ethiopian Trade Journal
FAO	Food and Agriculture Organization (UN)
GDP	Gross Domestic Product
IA+C	Information Analysis and Consolidation
IDRC	Institute for Development Research
IMR	Infant Mortality Rate
IOE	Investment Office of Ethiopia
ITC	International Trade Centre
LAN	Local Area Network
LDC	Least Developed Countries
MIGA	Multilateral Investment Agency

MOI	Ministry of Industry
MOT	Ministry of Trade
MTSC	Maritime and Transit Service Cooperation
NBE	National Bank Ethiopia
NPED	National Planning and Economic Development
OAU	Organization of African Unity
OCR	Optical Character Recognition
OECD	Organization for Economic Development
PMAC	Provisional Military Administrative Council, Dergue
PSSTE	Policy and Strategy On Science and Technology in Ethiopia
SISA	School of Information Studies for Africa
STCE	Science and Technology Commission of Ethiopia
STIDC	Science and Technology Information and Documentation Centre
TFR	Total Fertility Rate
TGE	Transitional Government of Ethiopia
TINET	Trade Information Network
TIS	Trade information services
UN-ECA	United Nations Economic Commission Africa
UNIDO	United Nation Industrial Development Organization
WAN	WIDE AREA NETWORK

# CHAPTER 1

## INTRODUCTION

### 1.0 INTRODUCTION

The Ethiopian economy, like that of many other developing countries, is linked to its foreign trade activities in many respects. The foreign trade is the source of income in many developing countries including Ethiopia. It plays a major role in meeting the requirements for both government expenditures, and expenditures of private enterprises. The manufacturing industries in developing countries have to depend heavily on foreign exchange, irrespective of the fact, whether they are public or private. The outputs of the agriculture and some industrial sectors, generate foreign exchange through exports. For any import, foreign exchange is a must. The export of many items is just impossible without the import of many essentials. Exports are the major sources for earning the foreign exchange. In this sense, nearly all, the vital spheres of the national economy of a developing country is linked up with foreign trade. Some of these vital spheres are:

- (1) the national income;
- (2) the domestic trade;
- (3) the manufacturing industries; and
- (4) the employment.

The contribution of export and import to the gross domestic product in Ethiopia has been, considerably low, as compared to that of many African countries. Their contribution has been declining over the past two to three decades. The declining feature of Ethiopian foreign trade; can be seen from the fluctuation of its foreign exchange earnings, and, at the same time, in its deterioration, leading to an overall negative balance of payment.

The export and import of a country, are the means of its sustainable growth through investments. Ethiopia falls within the category of nations, where their respective foreign trade has not contributed much to the growth and development of the economy. The main reason for this is that, its export sub-sector has never been functioning satisfactorily; nor, its sub-sector of import for promoting export. This is one of the primary reasons for the decline in its standard of living. Of course, there are many reasons for the poor performance of its export and import sub-sectors. Some of the important ones are the following:

- (1) The environment in which its export sub-sector functions, is extremely competitive.
- (2) The export base of Ethiopia did not get any opportunity of becoming large and extensive for a very long time.
- (3) For the purpose of carrying out export activities, as well as import activities to promote export activities, it is essential to have a conducive and promoting environment in the country; specially, at the government level. Unfortunately, it has been absent in Ethiopia for a long time.

It is a well-acknowledged fact that, the business of export and import calls for an appropriate information support system, in any country, for its efficiency and effectiveness. Such an information system is expected to provide information services, which are characterized by their pinpointedness, exhaustiveness, and expeditiousness. This is the kind of information service that can help the exporters and importers to function efficiently and effectively. Unfortunately, such an information system has been absent in Ethiopia. It is true that, there has been some information service systems to help export and import in Ethiopia. But, it has never been one, which could inspire all who are interested in export and import, to remain alert about what all they should know; and about the sources where they could find those important pieces of information.

The situation has changed in Ethiopia, largely to the satisfaction of those interested in export and import. Ethiopia is currently undergoing through a critical period of transition. It is now under the rule of the Transitional Government of Ethiopia (TGE). It has taken all the steps necessary to establish a democratic government through a free and fair election, according to the constitution adopted by its constituent assembly. By this time, the TGE has already adopted policies conducive to the development of export, import, and investment, by realizing their immense importance in the development of the Ethiopian economy. The TGE has identified the important reasons for the poor performance of the export and import sub-sectors of the foreign trade sector of Ethiopia.

Besides, it has full realization of the importance of an appropriate information support system for export and import in Ethiopia. The authorities concerned with export and import, are fully appreciative of such an information support system, that would help in creating a conducive environment to promote export and import activities in the country; and would also meet the information needs of the exporters and importers to their satisfaction. It is this line of thinking, that has promoted me to take up this project of designing a modern technology-based information support system for the export and import in Ethiopia. This chapter is devoted to furnish the following items of information relating to the project:

- (1) The statement of the problem;
- (2) The justification of the problem;
- (3) The objectives of the study:
  - (3.1) The general objectives;
  - (3.2) The specific objectives;
- (4) The scope of the study;
- (5) The limitations of the study; and
- (6) The organization of the thesis.

## 1.1 STATEMENT OF THE PROBLEM

Ethiopia is categorized with the countries having very low per capita income. The economic growth of Ethiopia, in the past 25 years was not at all satisfactory. Nevertheless, the fact that it is a country with substantial resource potential, leaves an excellent opportunity for investment and foreign trade, leading to its subsequent development. The availability of resources is not an end by itself. There is enough to do beyond acknowledging the existence of resources. It needs an all rounded effort from the government to utilize the resources appropriately; and thereby, achieve a sustained economic growth (World Resource Institute 1994).

A new economic policy, which is geared to the creation of a free market based economic system, has been adopted since 1991. The role of the state in direct production and export of items, is now limited to selected strategic sectors, and activities of comparative advantage. So also is the case with the import of essential items.

The Ethiopian government has taken several policy measures, such as, the following:

- (1) The liberalization of investment policy;
- (2) The modification of labour laws;
- (3) The updating of banking and insurance policies;
- (4) The amendment of custom laws; and
- (5) The devaluation of the exchange rate.

As a result, a new conducive business environment for trade and investment in general, and for export and import in particular, has been created.

The new economic policy, aims at an overall economic and social development. But, it would be impossible to speak of the Ethiopian economy as a viable proposition, unless its export capacity could be made to increase progressively. The economic development is largely dependent on foreign exchange, which, in principle, should ultimately come from exports. Despite the paramount importance of exports to the development of national economy, Ethiopia's export base and structure have remained more or less unchanged for the past three decades. Besides, its export performance has been very poor (Eshetu 1992).

The cause for the poor export performance of Ethiopia, can be attributed to the following factors:

- (1) Dependency on export of a few commodity products, which are highly sensitive to fluctuation, and drop of international commodity prices.
- (2) Lack of expertise in international trade and finance.
- (3) Lack of awareness of potential export areas by entrepreneurs.
- (4) Lack of awareness of potential export areas by exporters.
- (5) Poor export infrastructure.
- (6) Unfavourable land owning rules and regulations.
- (7) Lack of awareness of transportation, and communication charges.
- (8) The sporadic, haphazard, duplicated, and unsystematic approach in building, and running of export activities.
- (9) Lack of awareness of customs rules, regulation, and tariffs on export items.
- (10) Insufficient, and unplanned government investment in rural infrastructure.
- (11) Lack of foreign investment.
- (12) Lack of awareness, and difficulty in identifying currency exchange rates, insurance, and financial aspects like : way and type of payment, type of discount, letters of credit, export credit insurance, export credit guarantee, availability of loan, and its interest rate.

- (13) Absence of accurate statistical, and other relevant export information.
- (14) Inappropriate local pricing policies and regulations.
- (15) Insufficient incentives to export production, trade, and investment.
- (16) Deficiency of technical, and managerial capabilities, and lack of ready access to international markets.

The poor export performance of the country could mainly be attributed to the absence of an enabling environment for trade in general; and for export in particular. As a result, the capacity of export enterprises in a competitive context, is handicapped by the overall environment in which they operate, which is often not conducive to their development and growth.

It is a well established fact that economic and social development of Ethiopia is mainly a reflection of its foreign exchange earning potential; which in itself, is primarily a function of export. Thus, the lack of significant progress in the export sector, has a very serious implication for the country's economic development in general.

Poor export performance and development, leads to weak import capacity. Poor import capacity means decline in production, due to lack of imported inputs. It is a "back to square one" situation that characterises the current Ethiopian economy. Therefore, Ethiopia has to enhance its export capacities so as to boost its economy. An increasing inflow of foreign exchange on a sustainable basis, is untenable without increasing Ethiopia's export capacity (Ayalew 1992).

A well developed export capacity means a well developed import potential. Good import potential is not an end by itself. It has also its own set of problems. The major problems that are encountered, and that affect import activities resulting in poor import performance in Ethiopia are the following:

- (1) Over valuation of the Ethiopian currency.
- (2) Quality of items imported.
- (3) Amount of foreign exchange available for import.
- (4) Awareness, willingness, and capacity of citizens to purchase and utilize the items.
- (5) Local market niches, and know-how in marketing.
- (6) Awareness of the potential exporters, their prices, and the different guarantees related to the purchase.

Moreover, export and import activities need to be flexible, and innovative, so as to exploit the export and import opportunities; and identify market niches and know-how to market and purchase products. In addition, export products need to be produced in line with market demands; and import items need to be imported with quality. To meet these requirements, exports and imports should be planned by creating links with the different resources and their markets. This can only be met with a well designed trade promoting system (UNIDO 1987).

Therefore, the promotion of growth oriented competitive development of export and import activities has been given more emphasis in the development strategy of Ethiopia, because of their important contribution to overall economic and social development. Some of the activities in this regard are the following:

- (1) To generate income, and thereby, contributing to poverty alleviation;
- (2) To generate foreign exchange earnings, and foreign exchange savings; and
- (3) To contribute to the development of rural infrastructure; for, very many export items in Ethiopia are agricultural products.

Efficient and effective policies, and action mechanisms for the promotion and development of export and import enterprises in Ethiopia, can not be made in the absence of reliable and accurate information. Policies and plans should be backed by appropriate information. It would be evident from the earlier presentation that export and import activities are extremely information intensive. Solutions of many problems associated with these activities, simply depends upon to-the-point, exhaustive, and in-time information services. Such efficient and effective information services can be rendered, if and only if, there is a modern computer-based information support system, entirely dedicated to meet the totality of information needs of the exporters and importers of Ethiopia. Therefore, the problem at the national level, is the absence of such an information support system for export and import related information in Ethiopia. Corresponding to it, the study-problem is to design a computer-based information support system for export and import in Ethiopia; and to recommend its adoption by the appropriate authorities.

For the purpose of designing such a system, it would be necessary to take note of several factors, such as, the following:

- (1) The number of enterprises involved in export and import activities;
  - (2) The respective size of each of these enterprises;
  - (3) The differences in their respective information needs for this purpose;
  - (4) The adequacy or inadequacy of relevant information for this purpose;
  - (5) The problems of accessibility to relevant information;
  - (6) The different forms in which the users would prefer to have their information;
- and
- (7) The accuracy, reliability, and timeliness of the information and information services generated by the proposed system.

## 1.2 JUSTIFICATION OF THE PROBLEM

The problem of the study has been specified to be as follows:

" To design a computer based information support system for export and import in Ethiopia; and to recommend its adoption by appropriate authorities."

The justification of this study-problem may be furnished in terms of the benefits that can be derived from the services of this information system. But, before that, the back ground situation may be characterized.

As the situation exists today, the new economic policy of Ethiopia is a market oriented one. In line with this, the Ethiopian government is actively seeking to strengthen the Export and Import capacity of the nation. The promotion of growth oriented competitive development of export and import activities has been given more emphasis in the development strategy of Ethiopia, because of their important contribution to the overall social and economic development.

Let us now take note of the benefits that can be derived from the services of proposed information support system.

- (1) It would assist the businessmen, who would wish to consult a range of facts, and data to asses the trading prospects of a particular product, and its markets; and also to decide about the type of action needed to explore an existing trading opportunity.

- (2) It would help in Developing the awareness of private and public enterprises, regarding the different banking, insurance, and financial policies in relation to the items the entrepreneurs would like to export or import.
- (3) It would help the politicians, and policy makers in recognizing the merits and demerits of the policy framework regarding export and import in Ethiopia.
- (4) It would help export and import activities to be flexible and innovative in exploiting business opportunities.
- (5) It would help in identifying market niches, and know-how to market and purchase products, and in importing quality products in line with market demands.
- (6) It would help in developing efficient management system for export and import; and in developing linkages, and business relationships with other enterprises, such as, suppliers, and buyers; and this would ensure collective efforts in achieving goals that are difficult to achieve individually, such as, carrying out market researches.
- (7) It would help in appropriate selection, processing, and analysis of export and import mechanisms and opportunities.
- (8) It would help to set priorities, and monitor progresses or deficiencies in the area of export and import.
- (9) It would help to take the advantage of regional, and international trade information networks.

- (1) **Bilateral Foreign Trade:** When one country agrees to exchange a stated quantity of one commodity in exchange of a certain amount of another (a barter transaction), or where two countries, in a trade relationship, attempt to keep balance of their trade between them; the trade is referred as a bilateral trade.
  
- (2) **Multilateral Foreign Trade:** when a country or a nation carries out its buying and selling activities with two or more countries, the trade is referred to as a multilateral trade.

In comparison, multilateral foreign trade ensures a grater trade, than that ensured by a series of bilateral agreements.

The import trade refers of any country or nation refers to the process of bringing into the country the goods or commodities that it needs, from another country, by paying the price that has been agreed to between the two parties- that is, the importer and exporter. The exporter himself may supply the goods or commodities asked for directly to the importer, in response to his formal order. Or the exporter may arrange for their supply through consignment. In the case of a consignment, the exporter arrange for the supply of goods and commodities, which he has consigned to an agent. Here, of course, the agent enjoys the right of bargaining with the importer for setting the price.

The export trade of any country or nation, refers to the process of supplying goods or commodities, produced in the country, in response to the latter formal order. The exporter may supply the goods or commodities, either directly, or through consignment, as explained earlier.

In the business of import and export, there are always two distinct parties: (1) the importer; and (2) the exporter. The official status of each of these two parties varies. The import trade, or the export trade, may be two governments, or two public sector enterprises; or both parties may be two private sector enterprises. In addition, it is also not rare that one party is a government or a public sector enterprise, and the other party, is a private sector enterprise.

The import trade, and the export trade may pertain to goods or commodities, on the one hand; and services on the other. While the former group is referred to as visible items; the latter group is referred to as invisible items.

" Foreign Trade", which comprehends import trade and export trade of a country or nation, as a subject, forms an integral part of the broader subject, designated as "Commerce and Trade". From the point of view of the scope of this study, it has been kept confined to the import trade, and export trade of Ethiopia. Within this scope, it has been kept further confined to the import and export trade of visible items only.

#### **1.4.2 LIMITATIONS OF THE STUDY**

Reference is made to the specific objectives of the study, as enumerated in section 1.3.2. It be evident that, for the purpose of this study, I had to collect a lot of data corresponding to each of these specific objectives. Most of the data that I needed for my study were available with government agencies. It is a common experience that the collection of research data from government agencies becomes quite difficult on many occasions. The person, who can supply the requisite data, will not part with it, unless a formal permission is secured from the appropriate authority. For the purpose of approaching such an authority, for a formal permission, one has to bring a formal application from the head of an

institution. To go through, all these processes took a lot of time. As a result, it became very difficult to collect all data comprehensively. However, the amount of data that I have succeeded to collect ultimately, corresponding to each of my specific objectives of the study, may be regarded as adequate, as far as, this study is concerned.

The other sources of data for this study have been the business enterprises. It is a well known fact that, the private entrepreneurs involved in import and export trades, function within a very competitive environment; for, this reason, many of them consider the information available with them as confidential. For this reason also, difficulty arose in collecting data from these sources. However, there were quite a few others, who did not hesitate to cooperate. So in this case also, the collected data cannot be claimed to be comprehensive. But, they are also quite adequate for this study.

It is true that many items of information relating to a private enterprise involved in foreign trade may be regarded by it as confidential. For the purpose of designing the prototype database for my study, no attempt has been made to incorporate any confidential information of any enterprise. The data furnished in a profile of any database, are all that has been made public. For the purpose of this study all items that are designated as re-export items have been treated as export items.

The chapter on the proposed information support system, has a section designated as "Implementation". It is meant to specify all that is required to implement the system. But, in fact, this section has been devoted only to provide a set of general guidelines. In other words, the detailed implementation strategy has not been incorporated in this study.

## 1.5 ORGANIZATION OF THE THESIS

The thesis is organized as follows:

The first chapter is designated as "Introduction". This is, indeed, an introduction to the whole study. It deals with the statement of the study problem; and its justification. It is followed by the objectives of the study, which include, both the general objective and specific objectives. Besides, it specifies the scope and the limitation of the study.

The second chapter is designated as "Methodology". It is devoted to the specification of the different data collection methods employed for this study. The different methods used for the purpose are as follows:

- (1) The questionnaire method;
- (2) The interview method;
- (3) The observation method; and
- (4) The method of literature survey.

The purpose for which these different methods have been used, and the means adopted for using those methods are specified.

The third chapter is designated as "Export and import situation in Ethiopia". It reviews:

- (1) Ethiopian economy
- (2) Trade situations in Ethiopia
  - (2.1) Past export and import performances of Ethiopia
  - (2.2) Current export and import performances of Ethiopia
- (3) Factors that hinder the development of export and import in Ethiopia
- (4) Policy measures taken to promote export and import in Ethiopia
- (5) Action mechanisms adopted to promote export and import in Ethiopia

The fourth chapter is designated as " Organizations and institutions engaged in promoting the development of export and import in Ethiopia." It discusses, the export and import oriented activities, duties and responsibilities, market oriented activities; and information products, and services of the organizations and institutions which are directly or indirectly engaged in promoting the development of export and import in Ethiopia. A comprehensive list of these organization is given in Appendix 4.

The fifth Chapter is designated as " User study and the need for information in export and import". It discusses:

- (1) Basic features of export and import enterprises;
- (2) Role of information in export and import;
- (3) Value of information in export and import;
- (4) Sources of trade information; and
- (5) Basic functions of trade information systems;

The sixth chapter is designated as " System Structure and General System Specification for an Information Support System for Export and Import in Ethiopia". The item of information furnished in this chapter are as follows:

- (1) Problems of existing trade information services in Ethiopia;
- (2) Requirements for an export import information systems in Ethiopia;
- (3) General System Specifications and systtum structure for an information support system for export and import in Ethiopia:
  - (3.1) Hardware Specifications
  - (3.2) Software Specification
  - (3.3) Network

(3.4) Databases

(3.5) Interface

(3.6) Implementation

The seventh chapter is designated as " Conclusion and Recommendations". It is devoted to furnish relevant conclusions, and recommendations.

## **CHAPTER 2**

### **METHODOLOGY**

#### **2.0 INTRODUCTION**

The conclusion of any study depends on its premises. Even if the premises are appropriate it should be backed by reliable and valid facts. To achieve this, one has to look at the proper places, in order to get these facts. The identification of sources of relevant facts in carrying out a study is not an end on itself. The reliable facts could be obtained, only if one uses appropriate data collection methods.

To attain the specific objectives of the study, and for the purpose of developing a framework for an information support system for export trade and import trade in Ethiopia different data collection methods were adopted, for the different items of relevant information.

#### **2.1 DATA COLLECTION METHODS**

The methods that have been used are enumerated below:

- (1) The questionnaire method;
- (2) The interview method;
- (3) The observation method; and
- (4) The method of literature survey.

The following sections are devoted to explain how each of these methods was used.

### 2.1.1 Questionnaire Method

The questionnaire method was used for the following purposes:

- (1) To ascertain the information need of each category of identified potential users.
- (2) To ascertain pertinent facts about experts, organizations and institutions, information centres, and projects relating to export trade and import trade in Ethiopia; for the purpose of preparing profiles for each of these entities in each category to design the prototype databases.

It may be noted here that for the same purposes one or more appropriate other methods were used, to the extent necessary, for getting the collected facts confirmed, and supplement the already collected information.

Four different sets of questionnaires were designed for four different categories of entities. The questionnaires were distributed among the appropriate respondents, giving them sufficient time to fill them in. For the purpose of collecting the filled in questionnaires appointments were fixed according to their respective convenience. Wherever necessary, the respondent was informed that the researcher would like to utilize the opportunity to have a personal meeting with the respondent. The purpose was mentioned to be a short interview with him. In the case of an information centre, this opportunity was mentioned to be used for observational study. It may be mentioned here that in most of the cases the researcher succeeded to utilize this opportunity. For the purpose of collecting information by using questionnaire method, the researcher contacted:

- (1) Ten organizations and institutions;
- (2) Sixty Business enterprises;
- (3) Fifteen experts; and
- (4) Two information centres.

Data relating to the projects (Exhibitions and Trade fairs were collected mostly from the announcement literatures ( pamphlets, brochures,etc) issued during the time they were held.

### **2.1.2 Interview Method**

To ensure the reliability and validity of collected data, the interview method was used in most of the cases. It provided an opportunity for cross checking the data furnished by the respondents in the filled in questionnaire. In addition, it was used for seeking further clarification on many of the items of information furnished by the interviewees. It was of great help especially in ascertaining the information need of the user.

In ascertaining the validity of the facts about the information centres, the interview method helped a lot. Besides the items of information, which were collected by using the questionnaire method, there was a need for an important item of additional information. It was to ascertain the reaction of the prospective users of the proposed information support system. For all reasons, the research design included the use of the interview method for data collecting in addition to the questionnaire method. In fact, the interview method helped a lot. Even in identifying many of the organizations and institutions dealing with export and import in Ethiopia; as well as, those dealing with information on foreign trade. The information about the projects of export-import promotion was partially collected through interview method.

For conducting the interviews an appropriate interview schedule was designed and used. Interviews were conducted among the identified persons, business enterprises, organizations, and institutions. A list of those who were interviewed is given on Appendix 3.

### **2.1.3 Observation Method**

It was possible to identify two centres, which satisfy the condition of being designated as information service centres, so far as export-import information is concerned. In addition, there are several other organizations, and institutions, which provide information on export and import in Ethiopia. But, they are not actually information service centres. For the purpose of getting familiarity with the functioning of these establishments, the observational method was used. For this purpose prior appointments were fixed. It may be mentioned here that, the establishments visited for this purpose were fully cooperative in extending the necessary help to the researcher.

The establishments visited for this purpose are listed below:

1. Ministry of trade;
2. Addis Ababa chamber of commerce;
3. Ethiopian chamber of commerce;
4. Investment office of Ethiopia;
5. Ethiopian customs authority;
6. Ethiopian Standardization Authority; and
7. Ministry of industry.

#### 2.1.4 Literature Survey

The subject-scope of this study is complex and multifaceted. On the one side, it is the subject "Foreign Trade" comprehending "Import Trade" and "Export Trade" falls within the purview of this study. There again, the need arose to acquire the knowledge about "Foreign Trade" in general; and, with that background, to acquire the knowledge about "Foreign Trade in Ethiopia".

On the other side, the concern of this study is a "Computer-based Information Support System (CISS)". This is a very specific area within the discipline "Information Science". Designing a CISS calls for thorough knowledge about "Applied Computer Science". Besides, a CISS, as an information service production system, has to be thought of from the points-of-view of its (1) environment, (2) infrastructure, (3) input, (4) throughout (process), (5) output, and (6) feed-back mechanism. For designing the proposed CISS, it was essential to acquire update knowledge of all these facets of the complex subject of this study. The method of literature survey was the only effective means to perform this task. In addition, in many cases, literature survey has been used to supplement the information collected by using other methods. The documentary sources of information consulted and used for this purpose are listed in the bibliography, linking the sources to their respective references in the text.

The method of literature survey was used to collect relevant pieces of information from different documentary sources. But, for the purpose using those pieces of information in relevant chapters, the technique of "Information Analysis and Consolidation" (IA+C) was used.

## 2.2 FACILITIES AND TOOLS USED FOR SYSTEM DEVELOPMENT

It may be noted here that, for the purpose of developing the prototype information support system the following facilities and tools have been used:

- (1) The network facility available at the School of Information Studies for Africa (SISA);
- (2) The Micro CDS/ISIS software for the creation of the databases;
- (3) The ABNCD (Abebe et al 1992) integrated database approach; and
- (4) CDS/ISIS Pascal for developing the interface.

**CHAPTER 3**  
**EXPORT AND IMPORT SITUATION IN ETHIOPIA**

**3.0 INTRODUCTION**

The economy of a country always changes. The factors that cause the changes in the economy vary in time, space, and magnitude; and those are too many. So many tags are allotted to countries with different economic sizes, and distribution. These include economic groupings, such as, developed or underdeveloped; developed or developing; 1st, 2nd, or 3rd world countries; and low income, middle income, or developed. Such designations have their root to the performance, standard, and diversity of a country's economy. And, recently a new designation has come to existence, and that is, developed or less developed countries. These terms have been coined by the United Nations General Assembly, as well as, other regional institutions or individuals (ECA 1992; Todaro 19897)

The above mentioned designations are assigned based on the basis of a number of economic indicators that show the absolute social, and economic standing of a country; or the relative social, and economic standing of a country in comparison to other countries. These economic indicators mainly show or reveal the macro economic performance of a country. Some of the economic, and social indicators that are used to measure or indicate the extent of economic development of a country include: Gross Domestic Product, Annual Growth Rate of Population, Per Capita GDP, Average Annual Growth Rate of Real Per Capita GDP, Life Expectancy at Birth, Infant Mortality, Literacy, Per Capita Public Education Spending, Exports, Imports, and Balance of Payments (Roy and Paul 1983).

But, it is a well established fact that, nations always strive to change and improve their economy. They need their economy to grow in a sustained manner. A sustained economic growth leads to economic development. The obstacles that countries encounter in their effort of accelerating their economic growth and development vary in degree and kind. The tools in their command also vary. The differences in the growth rate of countries reflect the enormous diversity in their command. The tools in their command could be availability of resources, economic structure, social and political traditions, management skills, and the last but not the least is their relationships to the international economy (The world bank 1994).

The relationship that countries have with the international economy takes the form of international trade. Trade between countries has been important due to the following conditions among others (CSA 1993):

- (1) Each country lacks some vital resources, either completely; or those are not sufficient enough; thus, it can only get it by trading with others.
- (2) Differences in each country's climate, labour force, and other endowments make it a relatively efficient producer of some goods within its territory.
- (3) Specialization permits larger outputs. Therefore, it offers economies of large scale production.

International trade is not simply the inter country flow of commodities, and financial resources. That is, international trade is not merely a transfer of goods and services of one nation to another. In the act of international trade and commerce apart from the transfer of goods, there is also a transfer of technology, consumption patterns, educational systems, health, and social systems, and institutional and organizational arrangements. In addition, ideas, life styles, and developmental and anti-developmental influences of other nations in the world will also be transferred.

The impact of such technological, economic, social, and cultural transfer on the character of development process can be either beneficial or malevolent. Much will depend on the nature of political, social, and institutional structure of the recipient country and its development priorities (Todaro 1989).

There is a persistent low levels of living, rising unemployment, and growing income inequality in the less developed countries. Ethiopia is not an exception to that rule. In addition, there is highly unequal distribution of economic, and political power between poor, and rich nations. It is manifested in the dominant power of rich nations, control of international trade. The root cause for such a division can be traced back to the revenue obtained from foreign trade.

Foreign trade is linked to all sectors of the Ethiopian economy: manufacturing, service, defence, etc. It is also linked to all aspects of economics, such as, income, employment, and living standard. Therefore, Ethiopia has to feet into the international trading environment in order to meet some of the requirements of its citizens. International trade has often played a very important role; though not necessarily a benign one, in the development of Ethiopia.

The benefit Ethiopia will obtain from foreign trade in its economic development can easily be justified, by looking more closely to the benefits and the rate of sustained economic growth achieved by the newly industrialized economies through their intensive effort for export (ECA 1992).

A considerable share of the monetary GDP of Ethiopia is derived from the overseas sale of agricultural primary commodities, such as, coffee, cotton, sugar, pulses, hides and skins etc (Ayalew 1992).

Ethiopia's foreign trade activity has influenced the rate of economic growth of the country. It also affects the further decline in the standard of living, poverty, unemployment, and raise in domestic prices. Ethiopian economy is highly dependent on, and is influenced by foreign trade conditions (Ghiorgis 1992).

This chapter is devoted to furnish, and examine the Ethiopian economy, and its foreign trade. It evaluates the past and current performance of export and import in Ethiopia. Then it enumerates factors that hinder the development of export and import in Ethiopia. Following that, it describes the trade and investment potential of Ethiopia. Lastly, it discusses the policy and action mechanisms adopted to promote export and import in Ethiopia.

### **3.1 ETHIOPIAN ECONOMY**

#### **3.1.1 General Information**

Ethiopia is located in the North-Eastern corner of Africa, popularly known as the Horn of Africa. It has a total land area of 1.2 million square kilometres (World Resource Institute 1994). It comprises a central highland mass, and lowlands surrounding it. With a population of 55.5 million, Ethiopia provides one of the largest potential markets in Africa. The Capital city, Addis Ababa, with a population of over 3 million, is the centre of business and industry in the country (CSA 1992). The organization of African Unity (OAU); the United Nations Economic Commission for Africa (UNECA); and several other international organizations have their headquarters in Addis Ababa.

The climate of Ethiopia is one of the nations great assets. It has a topography with an altitude ranging from -100 meters to 4620 meters above the sea level. Ethiopia lies within the tropical regions, and is endowed with "Thirteen months of Sun Shine."

### 3.1.2.3 Mining

It is believed that Ethiopia has a similar geological formation as in other Middle Eastern countries. Hence, possibilities exist for oil and gas deposits. Traces of several minerals have been found in many parts of the country. The potential has not been harnessed and the sector contributes only 0.47 percent of the total Gross output (EAL 1994).

### 3.1.2.4 Trade

The major export item of Ethiopia is Coffee, followed by hides and skins, pulses, gold, and fruits and vegetables. The major imports are machinery, transport equipment, chemicals, spare parts, and other raw materials. The country's major foreign trade link is well-established with the countries of the European Economic Community. It accounts for 50% of exports and 38% of Ethiopian imports. Japan, former USSR, the Middle east and East Africa are also major trade links or foreign trade partners of Ethiopia in their order of partnership (CSA 1993).

### 3.1.2.5 Tourism

Ethiopia, a home of striking contrasts, has constantly fascinated travellers, explorers, adventurers, and scholars. Historical places, monasteries, ancient castles, and palaces, age-old monuments, endemic wildlife and birds add to the attraction of the physical features of the country, and all those are invaluable tourist attractions (ECA 1990).

### 3.1.3 Economic Structure

#### 3.1.3.1 Gross Domestic Output and its Structure

The Gross Domestic Product (GDP), as the sum total of goods, and services produced in Ethiopia (see Tables 1 and 2) has shown some increment in nominal values in the past 25 years. It should be noted that, the growth in GDP of a country, in monetary terms, does not necessarily indicate the economic growth of a country, because the growth can not be in real Gross Domestic Product (GDP).

TABLE 1

GROSS DOMESTIC PRODUCT OF ETHIOPIA FROM 1967/68  
TO 1979/80 AT 1960/61 PRICES (in million birr)

YEAR	GDP	YEAR	GDP
1967/68	3199.4	1974/75	3939.5
1968/69	3327.1	1975/76	4031.4
1969/70	3443.2	1976/77	4055.3
1970/71	3598.8	1977/78	4009.3
1971/72	3771	1978/79	4221.7
1972/73	3878.4	1979/80	4456.2
1973/74	3976.8		

SOURCE: 1. NBE. 1975. National Bank of Ethiopia Annual Report.

Addis Ababa: NBE.

2. NBE. 1980. National Bank of Ethiopia Annual Report.

Addis Ababa: NBE.



The real GDP measures the volume of real goods and services, by removing the effects of rising prices in nominal GDP. When GDP rises, it is not immediately apparent, whether the increase is due to rising prices or due to increasing outputs of real goods and services. Presumably, the material well being of a society is improved only by increasing output of goods and services. It should be noted that , it is not possible to compare the economies of countries using the magnitude of GDP. A country's gross output depends on, and is affected

by the area, resource availability, size of the population, and some other factors. However, the growth in the economy of a country can be revealed by computing the growth rate of real GDP of a country.

TABLE 2

GROSS DOMESTIC PRODUCT OF ETHIOPIA FROM 1980/81- 1993/94 AT  
1960/61 FACTOR COST( IN MILLION BIRR), AND GDP GROWTH RATES  
AT 1980 AND 1990 PRICES

YEAR	GDP GROWTH RATE AT 1980 PRICES	GDP GROWTH RATE AT 1990 PRICES	YEAR	GDP GROWTH RATE AT 1980 PRICES	GDP GROWTH RATE AT 1990 PRICES
1980/81	-	3.6	1987/88	6.50	2
1981/82	1.04	1.3	1988/89	-0.43	1.6
1982/83	5.33	5.4	1989/90	-4.10	-1.5
1983/84	-4.03	-3.4	1990/91	-	-0.5
1984/85	-6.50	-6.8	1991/92	-	-10.2
1985/86	2.03	6.6	1992/93	-	2.8
1986/87	2.20	9.4	1993/94	-	2.2

- SOURCES: 1. ECA. 1995. UN Economic survey of Africa 1993. Addis Ababa: ECA.  
 2. ECA. 1994. Survey of economic and social conditions in Africa 1991-1992. Addis Ababa: ECA.  
 3. ECA. 1992. Survey of economic and social conditions in Africa 1989-1990. Addis Ababa: ECA.  
 4. ECA. 1990. Survey of economic and social conditions in Africa 1987-1988. Addis Ababa: ECA.  
 5. ECA. 1988. Survey of economic and social conditions in Africa 1985-1986. Addis Ababa: ECA.

Although, the GDP of Ethiopia has shown some increment in nominal terms, the GDP has been declining in real terms. The decline was not in a very serious condition in 1970s. During these periods, though the GDP did decelerate, the total state of the economy had shown a moderate growth. It has shown an average growth rate of 4.4 percent before 1970, and 2.5 percent in 1970-76. But, in the latter years, its growth deteriorated to -10.2 percent in 1992; and then it had shown a growth rate of meagre 2.2 percent in 1994 (see Table 2) (ECA 1993; Eshetu and Manyazewal 1992).

It is also true that, as the gross output (and income) of a country grows, there are generally substantive changes in its economic structure. In Ethiopia, the percentage decomposition of the GDP into different economic sectors reveals (see Table 3) that, the lion share of the GDP comes from the agricultural sector. It indicates that, Ethiopia is agrarian in its economic, and social outlook.

Agriculture, both subsistent and commercial, is the principal economic activity in terms of the occupational distribution of the labour force, and the GDP. The sector has been contributing from 40-55 percent of the GDP in the past one and half decades. It is worth mentioning it that the sector has been contributing more than 50 percent of the GDP before fifteen years. The sectoral contribution to the Gross Domestic Output of the country has shown a decline for years( see table 3). It has shown a fluctuation and some times a significant deterioration in real terms (see Table 4) (Alemayehu 1993).

The decline in the percentage share, and contribution of the agricultural sector to the GDP was not caused by the improvements in the other sectors of the economy. It was rather, due to the decline in the output of the sector itself. Despite the fact that its contribution is declining, the share of the agricultural sector to GDP is still large.

TABLE 3

SHARE OF THE MAIN ECONOMIC SECTORS IN TOTAL GDP  
FORMATION (PERCENT) IN 1980 PRICES

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
AGR.	45.9	45.8	48.8	45	40.5	42.4	44.4	42.6	42.9	43.4	43.6	48.6
MAN.	16.2	16	15.9	17.8	19.1	18.5	17.6	17.4	17.2	16.2	15.8	14.1
SER.	15.4	15.6	15.6	16.7	17.6	17.3	17	17.3	17	17.2	17.3	20.

Source: 1. ECA. 1994. Survey of economic and social conditions in Africa 1991-1992. Addis Ababa:

ECA.

TABLE 4

AVERAGE GROWTH RATES IN REAL AGRICULTURE, AND  
MANUFACTURING OUTPUTS GROWTH IN THE 1990 PRICES, AND SERVICES IN  
1980 PRICES

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
AGR.	3.7	-1.3	4.7	-9.9	-16.3	9.2	15.2	-2.1	2.2	0.2	8	-7.5
MAN	4.5	3.9	5.69	3.3	1	4.4	5.2	1.7	1.9	-3.8	-18.7	-2.8
SER.	5.40	4.62	0.07	2.22	5.49	6.19	4.95	6.93	1.5	0.62	-9.03	0.9

SOURCES: 1. ECA. 1995. UN Economic survey of Africa 1993. Addis Ababa: ECA.

2. ECA. 1994. Survey of economic and social conditions in Africa 1991-1992. Addis Ababa: ECA.

3. ECA. 1992. Survey of economic and social conditions in Africa 1989-1990. Addis Ababa: ECA.

4. ECA. 1990. Survey of economic and social conditions in Africa 1987-1988. Addis Ababa: ECA.

5. ECA. 1988. Survey of economic and social conditions in Africa 1985-1986. Addis Ababa: ECA.

Moreover, the decline in the contribution of the agricultural sector to the GDP, was not compensated by a growing share of industry and manufacturing or the service sectors. The industry retains its share in the total output, at the expense of the agricultural sector (Alemu 1992). The former did not grow at all in the last decade or two. It has shown only some improvement in the last couple of years.

It is the service sector which has shown some improvement. Although, the service sector has shown some growth, the growth is ambiguous. Because, in developed economies, the contribution of the service sector is high, and rising in response to changes in the pattern of demand.

In Ethiopia, the growth in services is only partly based on changes in the pattern of demand. Nor, is its contribution significant. It also reflects its inability, rather than the absence of the industrial sector, to absorb fully the urban labour force (Roy and Paul 1978).

It should also be noted that, these broad changes in the GDP sectoral composition of production, do not convey the full character of changes in the economy. For instance, they do not depict the improvements in the availability of transportation, communication, etc. They do not depict the expansion in the capacity to borrow, and adopt technology that is vital to the expansion and diversification of the economy's productive capacity. Nor, do they suggest the gains in the human skills, both in industrial labour and management, that play significant role in modern economic growth. Such developments are difficult to quality and data about social factors are scarce in Ethiopia.

Therefore, from the declining nature of the real GDP and agricultural output, and the absence of development in the other sectors of the economy, it could be said that the economy of the country is declining.

### 3.1.3.2 GDP Per Capita

The GDP is the most commonly used measure of the overall level of economic activity. The GDP Per Capita is often used as a summary index of the relative economic well-being of the people in different nations.

Ethiopia is one of the five least developed African countries economies with very low Per Capita GDP. The per capita GDP of Ethiopia is very much lower than the average per capita GDP of the Least Developed Countries (LDC) of Africa (see Table-5).

The per capita GDP of Ethiopia has been declining every Year. The deteriorating nature of the growth rate of the Per Capita GDP of Ethiopia also indicates the deteriorating feature of the Ethiopian economy in the last decade. It indicates also the decline in the standard of living of its citizens. If we take the per capita GDP, and the growth rate of the per capita GDP, as indicators, and a measures of performance of Ethiopian economy Ethiopia stands as one of the very poor countries of the world according to the UN demarkation line (U.S.D 137.00) for absolute poverty (ECA 1993; Eshetu 1993).

TABLE 5  
PER CAPITA GDP IN US DOLLARS( 1990 PRICES) OF FIVE  
OF THE LEAST DEVELOPED COUNTRIES OF AFRICA

YEAR	ETHIOPIA	SOMALIA	MOZAMBIQUE	TANZANIA	AFR. LDC	GDP PER CAPITA GROWTH RATE of ETHIOPIA
1981	140.5	125.1	113.8	107.8	259	1.2
1982	139.9	125.8	110.9	104.7	256	- 1.2
1983	144.8	105.9	87.2	99.1	251.5	2.9
1984	137.5	112.5	85.3	98.9	246.9	- 5.9
1985	125.9	116.2	79.6	98.3	245.2	-9.5
1986	131.6	111.5	78.8	98.3	251	3.9
1987	141.1	109.6	80.1	99.6	247.8	6.7
1988	141.1	108.6	82.5	100.1	249.4	- 0.9
1989	140.5	107.7	84.7	99.7	250.2	- 1.3
1990	135.6	104.2	83.4	100.2	245.8	- 4.4
1991	132.2	92.4	83.4	100.7	241.3	- 3.4
1992	116.4	78.5	79.4	96.4	228.4	- 13.5
1993	117.3	76	81.3	97	222.9	- 0.3
1994	117.5	58.1	81.9	96.3	220.8	-0.9

SOURCE: ECA. 1995. UN Economic survey of Africa 1993. Addis Ababa: ECA.( The 1994 data is an estimated value)

### **3.1.3.3 Population**

Population size, and its growth rate are important determinants of the general pace of economic and social progress of a country. They have profound implications for development. The general picture is clear. The increase in population will affect resources, and the environment in many ways. Population growth will heighten demand for food, energy, water, health care, sanitation, and housing.

Population growth also creates increased demands in the fields of education, and leisure, not to mention protection against the development of crime, and violence. Population growth can also be linked to mortality rate, life expectancy, fertility rate, health and nutrition, and education to mention a few.

The rate of population growth matters because of human inability, to adopt to changing conditions. If population grows slowly human behaviour, institutions, and technology will likely adopt fast enough to accommodate the growth. The political, social, and administrative effects are also serious. But, in Ethiopia the population grows quickly. More stress is put on environmental resources, physical infrastructure and the government.

It has been indicated earlier that the contribution of the agricultural sector to the GDP of Ethiopia is deteriorating with the decline in the agricultural output. On the other hand, the population of Ethiopia is increasing on the average at the rate of 2.9 percent every year (CSA 1991). Nevertheless, the growth rate of agriculture did not go with the same rate.

If the sector has to feed the population at large, and if the country has to be self-sufficient in food, the growth of the population should be planned to go in parallel with the growth in the agricultural sector. Otherwise, the agricultural sector has to produce a surplus. But, the per capita agricultural GDP was almost negative in the past 15 years( see Table 6). As a result, the country is not yet self sufficient in food.

TABLE 6  
GROWTH RATES OF AGRICULTURAL OUTPUT, POPULATION, AND  
PER CAPITA AGRICULTURAL GDP OF ETHIOPIA 1981-1993

YEAR	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
AGR.	3.7	-1.3	4.7	-9.9	-16.3	9.2	15.2	-2.1	2.2	0.2	8	-7.5	-0.4	-1.2
POPU.	2.5	2.5	2.5	2.5	2.7	2.7	2.7	2.9	2.9	2.9	2.9	3.1	3.1	3.1
PerCAP														
AGR. GDP	1.2	-3.	2.2	-12.4	-18.9	6.5	12.5	-5.0	-0.7	-2.7	5.1	-10.6	-3.5	-4.3

SOURCES: 1. ECA. 1995. UN Economic survey of Africa 1993. Addis Ababa: ECA.

2. The World Bank. 1992. World development report 1992. England: Oxford University press.

3. The World Bank. 1993. World development report 1993. Washington: The international bank for reconstruction and development.

The agricultural sector is very important. This is because, in addition to its being a consumption source, it is also a sector for employment generation. It absorbed more than 80 percent of the work force in Ethiopia. With a declining agricultural output, the consequences of population growth will undoubtedly have a disastrous effect to the Ethiopian economy (Alemayehu 1993; ECA 1994).

The high rate of population growth in the past 25 years affected the economic and social development of Ethiopia. It has made the economic development of Ethiopia very complex. But, development is about improving the wellbeing of the people. The essential components of economic development are: raising living standard; equality of opportunity; and human capital formation (The World Bank 1992).

### 3.1.3.3.1 Human Capital Formation

Human capital formation is one of the most important factors in determining the population productivity, behaviour and values of a given society. Human capital is the result of investment in education and health. Such investments increase people's options, raise their productivity at work, and change their behaviour at home (World Development Report 1994).

Educational investment is measured by formal attainment levels by the number of total school enrolments. It is better result, if it is made to measure in connection between women education and fertility rates (World Resource Institute 1994-95).

TABLE 7

EDUCATIONAL ENROLMENT OF SCHOOL AGE CHILDREN OF ETHIOPIA,  
SUB-SAHARAN AFRICA AND THE WORLD (IN PERCENT)

COUN- TRY OR Region	PERCENTAGE ENROLMENT IN EDUCATION OF SCHOOL AGE CHILDREN IN DIFFERENT CATEGORIES										
	PRIMARY		SECONDARY		TERTIARY		LITERACY			FEMALE ENROL.	
	1970	1990	1970	1990	1970	1990	1982	1984	1986	Primary	Seconda
ETH.	16	38	4	15	0	1	45	56	64	30	15
LIEA.	74	105	20	38	2	-	-	-	-	98	34
S.S.A.	46	68	6	17	1	2	45	51	61	44	26
WOR.	83	104	31	65		13	11	40	45	50	99

SOURCES: 1. The World Bank. 1992. World development report 1992. England:

Oxford University press.

2. The World Bank. 1993. World development report 1993. Washington:

The international bank for reconstruction and development.

This percentage increment of primary and secondary school enrolments (see Table 7) has shown some growth. That is, the human capital formation trend of Ethiopia has shown some improvements in relation to education. But, the improvement is not adequate. Because, first the literacy percentage has increased over time. Second, the tertiary level enrolment is still quite low. Third, the pattern of education in Ethiopia indicates that, the percentage enrolment of the school age children in education is far less than the average of that of the low income economies of Africa, the Sub-Saharan Africa, and even the world averages (See Table 7).

Education as a means for creating job opportunity is likely to increase the participation of women in the work force. Productivity is a reflection of women participation in the work force. Ethiopia is characterized by low levels of productivity. Educational investments are burden to Ethiopia, because of the poor economic stand. Education is also likely to reduce the total fertility rate and crude birth rate and, thereby, it would increase productivity.

TABLE 8  
CRUDE BIRTH AND TOTAL FERTILITY RATES OF  
ETHIOPIA, AFRICA, AND THE WORLD

PERIOD	CRUDE BIRTH RATE			TOTAL FERTILITY RATE		
	Ethiopia	Africa	World	Ethiopia	Africa	world
1970-75	48.0	46.8	31.5	6.8	6.6	4.5
1990-95	49.1	43.0	26.0	7.0	6.0	3.3

Source: The World resource institute. 1994. World resources 1994-95.

U.S.A.: World Bank.

Rapid population growth has two causes. First, improved health condition, that is, a better investment on health and primary care.( which is not the case of Ethiopia, because it is negligible as shown in Table 9) . Health investments are also reflected in the increasing life expectancy, declines in Crude Death Rate (CDR), and Infant Mortality Rate (IMR). Life expectancy in Ethiopia is far below the World average, and the African average.

Second, and an expanding population base, that is, a very high population size- with high population growth rate. Population growth is also affected by Total Fertility Rate(TFR); as a consequence to that, it will also affect economic growth and development.

The TFR has always been increasing in the Ethiopian perspective then causing to much influence on the agricultural sector. The latter has been declining every year. The high TFR also has an influence on the population base. Both the TFR and CBR have been increasing in Ethiopia. Both are also high as compared to the African and World averages (See Table 8).

Ethiopia's trend of human capital formation also signifies that investment on health has not been improving for years. The number of physicians, nurses, and daily calorie consumption, which are related to health investments in Ethiopia , indicate that the investment on health is at a very low level in comparison to the average of low income countries African, Sub-Saharan African and the World (See Table 9).

In addition to struggling with low income, many people in Ethiopia fight a constant battle against malnutrition, disease, and ill health. This indicates that investments in the area of health are not adequate. This reflects the very low economic potential of Ethiopia to put huge investments on health oriented infrastructures.

TABLE 9

POPULATION PER PHYSICIAN, POPULATION PER NURSING PERSON, AND  
AVERAGE DAILY CALORIE CONSUMPTIONS OF ETHIOPIA, LOW INCOME  
ECONOMIES, SUB-SAHARAN AFRICA, AND THE WORLD

ECONOMY	HEALTH AND NUTRITION					
	No OF PHYSICIANS		No OF NURSES		DAILY CALORIE	
	1965	1984	1965	1984	1965	1984
ETHIOPIA	70190	78780	5970	5390	1853	1667
L. I. ECONOMIES	9640	5800	5980	2150	1975	2406
SUB SAHARAN AFRICA	33310	26670	5420	2180	2074	2122
WORLD	6050	4200	3700	1600	2383	2711

SOURCE: The World Bank. 1993. World development report 1993. Washington: The international bank for reconstruction and development.

TABLE 10

LIFE EXPECTANCY AT BIRTH OF ETHIOPIA, AFRICA, AND THE WORLD

PERIODS	YEARS OF LIFE EXPECTANCY AT BIRTH		
	ETHIOPIA	AFRICA	WORLD
1970-75	41.0	46.1	57.9
1990-95	47.0	53.0	64.7

Source: The World resource institute. 1994. World resources 1994-95.  
U.S.A.: World Bank.

A declining death rate is one of the major accomplishment of civilization. The death rate drops as the life expectancy rises. But unlike in other developed countries, as the life expectancy rose the birth rate didn't fell in Ethiopia. Rather, it accelerated as the death rate dropped. The growth rate of crude birth rate of developed countries is 0.4%; while it is 2.9% in Ethiopia, which is quite high as compared to world wide average of 2%. The Infant Mortality Rate (IMR) of Ethiopia is still higher than African and world averages. That still supports the proposition that health investments in Ethiopia is of a very low level. This is also an indicator of low level of economy (See Table 11).

TABLE 11

CRUDE DEATH RATE AND INFANT MORTALITY  
RATES OF ETHIOPIA, AFRICA, AND THE WORLD

Period	Crude Death Rate			Infant Mortality Rate		
	Ethiopia	Africa	world	Ethiopia	Africa	World
1970-75	23	19	12	155	135	92
1990-95	19	14	9	122	95	62

Source: The World resource institute. 1994. World resources 1994-95.

U.S.A.: World Bank.

The consequences of rapid population growth manifest as: an increase in the share of resources devoted to social sectors; and a massive exodus of rural youth towards urban centre, which leads to an increase in unemployment and underemployment.

3.1.3.3.2 Investment and Savings

Ethiopia's development strategies have laid considerable stress on expanding investment in order to accelerate economic growth. The effort made to raise the rates of gross domestic investment through public and private investments were not adequate. Thus it has resulted in the decline of the rates of investment and savings. The inflow of external capital due to investment was not adequate in the past. So also was the case of domestic savings (Eshetu 1993).

In the past three years, with the adoption of a new investment policy, the share of investment in GDP formation has shown improvement. Nevertheless, the savings have not shown significant improvement ( See Table 12) (ECA 1993; CBE 1994).

TABLE 12

SHARE OF INVESTMENT IN TOTAL GDP FORMATION (IN PERCENT)

YEAR	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	BB
INVES.	10	11.6	11.4	13	13	12.8	12.6	17.2	17.6	38	40.1	43.4	41.7

SOURCE: ECA. 1995. UN Economic survey of Africa 1993. Addis Ababa: ECA.

Therefore, the prevailing economic and social conditions of Ethiopia is characterised by:

- a very low standard of living,
- a declining GDP ,
- a high mortality rate and TFR; and
- low productivity.

These factors are all self- reinforcing social and economic phenomena in Ethiopia; and as such are the principal manifestations of underdevelopment or of low economic growth in the country.

### **3.2 TRADE SITUATION IN ETHIOPIA**

Nations trade in goods and services produced as a result of natural endowment or technological endeavour. This makes possible the division of labour and economies of scale in order to satisfy the expanding size of the market. Thus international trade serves as a venue for the transmission of new ideas via modern technology, capital, consumer goods and services. Therefore, international trade is a major global operation which has assumed great importance economically and politically over the years ( CSA 1993).

Ethiopia should improve its foreign trade activities to attain sustainable economic growth. This can be attained only by improving the contributions of all sectors of the economy to foreign trade, and thereby, to the GDP. The main objective of Ethiopia's foreign trade is to improve the quality of life, inter-alia, increasing productivity in the rural areas, and thereby, providing all people, especially in the rural areas, with adequate and constant supplies of better quality goods, essential commodities and services (Getachew 1990; ECA 1993).

However, since the 1970s, Ethiopia's trade performance, domestic, intra-African, and international, has been disappointing. The major cause for the very disappointing performance of trade is the very low priority given to the sector. Generally speaking, the government, international organizations, and bilateral donors put a very negligible effort in their investment, and resource allocation programs to the trade sector. As a result, the benefits that could have been obtained from the trade sector.

Despite efforts to strengthen its bargaining position in international negotiations, Ethiopia's share in world trade had been marginalized. The domestic trade of Ethiopia has not kept pace with demand functions. And it is indicated by serious shortages of food, essential commodities, and services in many parts of the country during the past two decades (Ghiorgis 1992).

The cause for the decline in the performance of domestic as well as international trade is attributed to the trade situation of the country. The trade situation of Ethiopia, in one way or another, was characterized by the absence of conducive environment both domestically and internationally. Factors contributing the genesis of such an environment are the

country's inward oriented trade, high priority to import substitution, and prohibition of import through high duties and taxes on export.

The environment did not allow the export and import sector to make its utmost contribution to economic growth of the country. It has resulted in the development of contraband and smuggled export. The consequence being reduction in foreign exchange revenues. Ethiopia's trade situation was characterized by as Ethiopians call it an "Ayer be Ayer Niged.", Its literal translation is "an air by air trade". This is a sort of a black market trade, which is characterized by trade of smuggled commodities into and out of the country, selling and buying things outside the legal market without a licence for trade, market price fixation based on creation of scarcity of goods and avoidance of all sorts of tax payments to the government. According to Wogene (1995) this accounts for 40 percent of the GDP.

Further, The foreign trade situation of Ethiopia, was characterised by unstable market, high degree of risk, uncertainty, and vulnerability to changes in the world market. Recently, the situation has been aggravated by the breakdown of the negotiations on international commodity agreements on primary commodities of interest to African countries (Getachew 1992).

This recent event has aggravated the adverse situation of Ethiopia's foreign trade and it has affected the economy of Ethiopia. On the average, 13.3 percent of the real GDP of Ethiopia is derived from the overseas sale of mainly agricultural and other primary commodities. The prices of many agricultural primary commodities, which are of export interest to Ethiopia, have declined steadily to the lowest levels in the past fifteen years (See Table 13). In addition, this state of affairs has resulted in the uncertainties in export earnings,

deterioration terms of trade, and fluctuation in the exchange earnings of Ethiopia (The World bank 1994; NBE 1992).

TABLE 13  
PRICE OF COMMODITIES WHICH ARE OF INTEREST  
TO ETHIOPIA AT CONSTANT 1990 PRICES(\$ U.S.)

YEAR	COMMODITY				
	COFFEE( KG)	TEA (Kg)	BANANA (Kg)	ORANGE (Mt)	COTTON (Mt)
1980	3.62	3.10	526.6	542.7	2.84
1981	2.88	2.79	555.4	560.5	2.55
1982	2.44	2.72	526.1	540.5	2.24
1983	3.05	3.35	616.7	536.7	2.67
1984	3.52	5.08	543.0	517.9	2.62
1985	3.29	2.89	554.4	560.8	1.92
1986	2.56	2.38	471.9	486.7	1.31
1987	2.24	1.92	411.3	513.3	1.86
1988	1.66	1.88	501.6	475.7	1.47
1989	1.31	2.13	577.7	470.6	1.77
1990	1.27	2.03	540.9	531.1	1.82
1991	1.17	1.81	548.1	510.4	1.64
1992	1.03	2.88	443.9	459.0	1.20

Source: The World resource institute. 1994. World resources 1994-95.  
U.S.A.: World Bank.

The only way for the country to cope up with such a decline was to produce more and more volume of these items. However, this also could not be attained. The major factors that hampered the development of foreign trade, and as a result the earning of revenue from the export of primary commodities are:

- (1) The utilization of traditional form of agriculture;
- (2) The lack of adequate awareness about the benefit of utilizing;
- (3) The cost of fertilizer; and
- (4) The failure in policies which sets quota to export products.

Though the last factor can be rooted to the absence of a conducive environment, the others can not be attained in the absence of an export revenue. The solution calls for foreign debt for foreign exchange.

The trade situation in relation to the export of manufactured and semi-manufactured goods is of very small volume. So is the revenue obtained from it. Moreover, the manufactured goods are mostly labour intensive products. Very few of those are modern technology-based products. The trade of such items is characterized by low adaptability and flexibility to changes in demand in the world market. The ultimate result is the deterioration of in terms of trade (Alemu 1993).

The foreign trade of a developing country largely depends upon the importation of raw materials, machinery, and capital goods. However, the import behaviour always exceeds the export potential (CSA 1993).

Ethiopia's foreign trade is also characterized by the chronic deficits of its balance of payments position. The severe deficits on current and capital accounts has, therefore, led to a rapid depletion of its international monetary reserves, and it has slowed down in its economic growth. (NBE 1992). The situation of the foreign reserve condition of Ethiopia has once reached a stage in which it could only cover only a 10 days import. Recently, the government has announced that its foreign reserve has shown an improvement, and will cover import of 26 weeks (President's address to the nation 1994).

TABLE 14

SHARE AND DESTINATIONS OF EXPORTS AND IMPORTS  
OF ETHIOPIA (IN PERCENT) IN THE LAST FIVE YEARS

DESTINATION	YEAR	1989	1990	1991	1992	1993
U.S.A	EXPORT	15.10	13.55	6.09	4.61	9.99
	IMPORT	8.67	6.53	14.26	7.32	11.41
ASIA	EXPORT	19.37	27.54	33.81	45.53	34.28
	IMPORT	15.58	15.68	28.87	33.69	35.11
AFRICA	EXPORT	6.62	12.61	5.21	7.22	13.44
	IMPORT	3.87	3.57	9.56	10.85	8.31
EUROPE	EXPORT	58.81	45.15	54.79	42.54	42.22
	IMPORT	67.53	68.02	44.62	42.97	42.07

Source: NBE. 1994. National Bank of Ethiopia, Quarterly bulletin; Fiscal year series, Vol 9 (2), Second quarter series, Second quarter, 1993/94. Addis Ababa: NBE.

It is also a well known fact that the degree of interdependence in foreign trade among nations does take different forms and strength. The trade system and situation in the past did not favour in deriving all the potential benefits usually obtainable from foreign trade; for, the trade structure was uni-directional. That is to say, though, the trade is equally important to Ethiopia as it is to its partners, the price of commodities were used to be primarily determined by its industrialized trade partners. Still today Ethiopia is more of a price taker on its own products than a fixer. In addition, the bigger share of exports from Ethiopia used to be sent to European countries, and not to countries where the trade agreements could ensure more mutual benefits (See Table 14) (CSA 1993; Getachew 1992).

The former government had adopted import substitution policies. It was not be a trade characteristic of an agriculture based economy like that of Ethiopia. As a result the trade situation at the time affected all sectors of the Ethiopian economy. Ethiopia had curtailed imports as part of its fiscal and monetary austerity aid measures. It had led to slowing

down of its over all economic growth, and to a rise of its unemployment. According to some economists, the contribution of the foreign trade sector to the GDP is small. So also is the revenue of the government from export taxes. This situation has been prevailing for a long period.

The poor trade performance is rooted in the failure to adopt appropriate policies, and the absence of appropriate promotion mechanisms. This has contributed much the trade deficit as well as to the decline in export volumes. Second, the trade sector as an engine for sustainable economic growth has not been accorded due recognition. That has made the foreign trade situation to be unstable in Ethiopia, in fact, it also affected domestic trade values. The country's trade situation as it exists today may be characterized in terms of the following attributes:

- (1) A very high and increasing trade deficits;
- (2) Growing foreign debt;
- (3) Diminishing international reserves;
- (4) Inflation of 20 percent; and
- (5) The wide spread adoption of fiscal and monetary measures like devaluation.

The result is a continued wide-spread mass poverty, further deterioration of the declining standards of living, high rate of unemployment, and increase in domestic prices.

### 3.2.1 PAST EXPORT AND IMPORT PERFORMANCES OF ETHIOPIA

It has been discussed in section 3.2 that the foreign trade situation of Ethiopia is characterized by the absence of an enabling environment for efficient and effective performance of export and import. However, sustainable economic growth, and development of Ethiopia could not be achieved without a continuous and sustainable revenue from the export sub sector of the Economy.

The structure of Ethiopia's exports is highly dominated by the export of quite a few major commodities which account for more than 97.9 percent of the total export earning of 1992/93 (See Table 15) (NBE 1993; Ghiorgis 1992).

TABLE 15  
SHARE OF MAJOR EXPORT ITEMS AS A  
PERCENTAGE OF THE TOTAL VALUE OF IMPORT

YEAR	COFFEE	BEE'S WAX	HIDES & SKINS	OIL SEEDS	PETROLEUM	PULSES	LIVE ANIMALS	FRUITS & VEGET.	CHAT
1983/84	63.5	0.4	10.10	2.99	7.95	2.17	1.57	0.45	3.11
1984/85	62.62	0.45	12.81	2.07	8.85	2.26	2.57	0.80	0.21
1985/86	71.96	1.37	12.93	0.83	4.78	1.36	2.04	0.65	0.91
1986/87	65.93	0.09	13.61	1.23	3.43	1.06	1.96	0.34	3.6
1987/88	56.76	0.31	17.19	2.84	4.66	2.08	4.18	1.05	2.7
1988/89	69.39	0	13.68	1.22	2.07	1.80	2.60	0.37	0.87
1989/90	54.57	0.23	18.19	1.13	3.56	4.88	1.46	0.20	2.8
1990/91	49.48	0.12	16.99	0.61	5.01	2.89	0.95	0.02	3.7
1991/92	60.32	0.23	21.01	0.13	6.74	0.13	0.16	0.16	1.8
1992/93	67.05	0.23	16.79	0.14	3.78	0.50	0.16	0.00	8.2

Source: NBE. 1994. National Bank of Ethiopia, Quarterly bulletin; Fiscal year series, Vol 9 (2), Second quarter series, Second quarter 1993/94. Addis Ababa: NBE.

Ethiopia's export items are mainly agricultural and animal husbandry products, such as, coffee, cotton, hides and skins. For this reason, the total export earnings are from primary commodities which are highly sensitive to changes in prices. Obviously, with a decline in price, there will inevitably be a corresponding decline in the revenue obtained from it (See Table 15).

The export item coffee accounts, on the average, for 67.5 percent of the foreign earnings for the period 1983/84- 1992/93. Hence, it shows that the export revenue of Ethiopia has been highly sensitive to changes in the price of its major export commodities, predominantly coffee. (See Table 13). With the decline of the price of coffee Ethiopian export revenue has been declining.

The decline of foreign exchange revenue was mainly associated with the mono commodity structure of the export sub sector. The export performance was poor because of the inability of the export structure to be flexible with the pattern of demand (NBE 1981; NBE 1993). On the other hand, the export of manufactured and semi-manufactured value added products constitutes a negligible amount of export revenue of the country. The export of these manufactured goods has been affected by increased domestic demand or input shortages (Alemayehu 1993).

The recurring fluctuation in export earnings is also attributed to the fluctuation in volume of most of the commodities. The fluctuation has been a bottleneck in planning for export. The decline in volume has been partly a result of the decline in price. The decline in price discouraged farmers. The result has been a decline in production, and in its quality. The inadequate production, poor quality of products, use of low level technology, absence of mechanization of production, inadequate infrastructure for transportation, and the lack of export promotion activities has, aggravated the decline of the volume export items, resulting in a poor export performance of the country.

The poor performance of the export sector has further influenced the remaining sectors. It has been the main source of revenue for investment to for importing equipments, raw materials, fuel and semi-finished goods, and spare parts. These account for 70 percent of the imports of Ethiopia. The import performance has been a reflection of the availability of foreign exchange. The decline in foreign exchange has resulted in a poor import performance (See Table 16).

TABLE 16  
SHARE OF MAJOR IMPORTED ITEMS AS A  
PERCENTAGE OF THE TOTAL VALUE OF IMPORTS

YEAR	FOOD AND LIVE ANIMALS	PETROLE	CHEMICAL	MACHINES AND AIRCRAFTS	ROAD MOTOR VEHICLES	GRAIN	TEXTILE	METAL & METAL MANU>	MEDICINE & PHARM.
1984/85	19.48	17.95	4.33	12.7	10.14	14.56	3.89	8.09	2.37
1985/86	24.10	11.47	3.99	12.47	13.04	17.37	3.59	7.58	2.65
1986/87	14.32	10.09	5.13	14.64	15.16	12.53	2.61	6.99	3.06
1987/88	10.83	9.52	4.86	20.45	16.26	7.80	3.05	7.67	2.21
1988/90	13.96	10.08	6.73	15.88	13.23	10.83	2.94	8.18	2.76
1990/91	5.82	12.33	6.80	16.69	10.37	3.99	3.03	11.66	3.53
1991/92	12.36	9.87	3.99	26.40	11.72	9.48	2.10	7.21	1.70
1992/93	0.79	10.66	2.35	10.46	9.78	0.00	4.06	2.73	2.26
1993/94	13.74	22.69	3.73	19.32	11.12	11.55	3.60	4.75	2.66

Source: NBE. 1994. National Bank of Ethiopia, Quarterly bulletin; Fiscal year series, Vol 9 (2), Second quarter series, Second quarter 1993/94.

Addis Ababa: NBE.

It has been identified that, the poor import capacity of Ethiopia is the main cause for the decline of input availability essential for export performance of the manufacturing sector. In addition, the inadequacy of domestic consumer goods calls for their import to meet the requirements of the country.

The import of food and other subsistence items do not have high share in the import activities of Ethiopia. In general, the poor import activities has affected the production of many consumer goods, as well as that of some value added export items. (Yohannes 1992). But, one very crude fact that one should note here is that, the import of the country always been exceeding its exports.

### **3.2.1.1 Balance of payments**

The overall balance of payments position of Ethiopia showed surplus only three times in the past 25 years. (See Table 17). First, those were in the years 1984/85, and 1985/86. The surplus was due to the overflow of foreign capital, services, and transfers obtained from abroad, in line with the assistance to overcome draught, and famine, which occurred in 1984. The overall balance shows surplus only in the fiscal year 1981/82, which was presumed to be due to the ever overall positive trade performance of the country (NBE 1981; NBE 1994).

Of course, there were years in which the trade balance showed an improvement. Despite the fact that there was a surplus in the overall balance of payment in the years mentioned above, the foreign trade balance, which is the net difference between export Free on board (F.O.B) and import cost, insurance and freight (C.I.F), was negative. That is, the amount of import was larger than the amount of export.

The trade balance was positive only twice in the past twenty five years. (See Table 17). And, that was two decades back from now. It was in 1972/73 and 1973/74 when the trade balance has showed a positive deficit. The all time high surplus during this year amounted to a total of 205.3 million Birr. The surplus was attributed to the foreign trade which was

characterized by a world wide virulent inflation; high shortage in supply of food; tremendous increases in oil prices; and turbulence in currency markets. Due to the shortage of food, other commodity prices raised. As a result, the export performance of less developed countries has increased. Ethiopia's trade balance also improved.

TABLE 17  
AMOUNT OF EXPORT, IMPORT, TRADE OVERALL BALANCE  
1970/71-1992/93 (IN MILLIONS BIRR) OF ETHIOPIA

YEAR	EXPORT	IMPORT	TRADE BALANCE	OVERALL TRADE BALANCE
1970/71	316.0	-448.4	-132.4	-52.4
1971/72	324.7	-467.1	-142.4	-15.8
1972/73	458.1	-436.1	21.7	-197.9
1973/74	599.4	-543.9	55.5	-265.3
1974/75	476.2	-700.4	-224.2	-15.3
1976/77	690	1028.8	-338.8	-133.8
1977/78	633.7	-1076.1	-441.4	-179.5
1978/79	881.7	-1249.5	-367.8	-7.8
1979/80	905.4	-1541.9	-636.5	-240.5
1980/81	805.1	-1528.9	-723.8	-199.6
1981/82	778.1	-1756.6	-978.5	125.3
1982/83	809.6	-1772.9	-963.3	-148
1983/84	929.6	-2007	-1137.4	-87.6
1984/85	744.6	-1770.4	-1025.8	95.8
1985/86	942.6	-2211	-1268.3	347
1986/87	809.6	-2236.9	-1427.1	-43.6
1987/88	788.1	-2274.7	-1486.6	-383.3
1988/89	918.2	-2110.4	-1192.2	-23
1989/90	756.9	-1824.2	-1067.3	-549.2
1990/91	572.1	-2130.2	-1558.2	-131.2
1991/92	318.4	-1810.9	-1492.5	-519.4

SOURCE: 1. NBE. 1975, 1981, 1990. National Bank of Ethiopia Annual Report. Addis Ababa: NBE.

2. NBE. 1994. National Bank of Ethiopia, Quarterly bulletin;

Fiscal year series, Vol 9 (2), Second quarter series, Second quarter 93/94. Addis Ababa: NBE.

However, with the decline in the price of the commodities, and with the stabilization of inflation in developed countries, the export performance of the country also deteriorated. Although, the increase in foreign exchange earnings from exports resulted in the improvement of foreign exchange holdings, the country's trade situation appeared paradoxical in the light of domestic food shortages and famine encountered during those years. The country during those days suffered from food shortages; for, all agricultural activities were focused towards the production of commodities for export (NBE 1984).

### **3.2.1.2 Share of Export and Import in GDP Formation**

The dependence of imports on exports, and the decline and stagnation of exports affected the country's GDP. It was seen that the export/import ratio was deteriorating; and the export/GDP ratio has also been declining. These indicated that, the share of the export sector has been declining (See Table 18). However, the ratio of import/GDP was increasing. That is, the country's import activity always exceeded its export activity. The imbalance affected the country's foreign exchange savings tremendously.

The deterioration of export earnings, coupled with its instability, influenced the measurement of monetary variables. The unexpected ups and downs, in export earnings adversely affected the domestic price situation, which was usually inflexible downwards. The high inflation rate discouraged savings and possibly distorted the allocation of resources further away from the optimum (Yohannes 1992).

TABLE 18

RATIO OF EXPORT/GDP, IMPORT/GDP AND  
EXPORT/IMPORT OF ETHIOPIA FROM 1981-1993

YEAR	EXPORT/GDP	IMPORT/GDP	EXPORT/IMPORT
1981	0.168	0.173	0.971
1982	0.154	0.197	0.781
1983	0.163	0.212	0.768
1984	0.176	0.261	0.674
1985	0.166	0.292	0.568
1986	0.144	0.302	0.476
1987	0.137	0.254	0.539
1988	0.137	0.228	0.548
1989	0.148	0.189	0.649
1990	0.136	0.223	0.719
1991	0.097	0.171	0.434
1992	0.79	0.171	0.461
1993	0.132	0.114	1.15

SOURCE: ECA, 1995. UN Economic survey of Africa 1993. Addis  
Ababa: ECA.

The total export earnings of Ethiopia was highly sensitive to changes in prices and quantities of the major export commodities. The degree of sensitivity of the relationships between these variables, that is, the relationship between export earnings, and changes in price and quantity of commodities has been studied in the Ethiopian perspective. The study shows there is under utilization of the export capacity, because of shortage of foreign exchange and market limitations. And, these two problems are largely results of lack of competitiveness in the world market. All these problems can be traced to the trade policies which do not favour exporters and the export sector at large (Yohannes 1992).

Therefore, the export and import sectors were performing in an environment which was not conducive for exporters and producers of export commodities to obtain a marginal profit, and thereby, to contribute to the economic growth to the country. This contributed highly to illegal exports and imports. The ever increasing flow of illegal exports to neighbouring countries was also another feature of the export and import sector of Ethiopia.

In conclusion, it is possible to say that the performance of the export and import sector was very unsatisfactory. It was the major cause and had the lion's share in the matter of the decline of the economy of Ethiopia.

### **3.2.2 Current Export And Import Performance of Ethiopia**

Hope and development is drawing in Ethiopia. After nearly two decades being ravaged and drained by war, recurrent draught, and draconian socioeconomic measures, the Ethiopian economy is showing signs of a new life following the change of government in may 1991.

The Transitional Government of Ethiopia (TGE) put into effect a new Economic Policy, declaring its commitment to democratic principles, and market oriented practices. This cleared the way for the government to come into agreement with World Bank, IMF and other institutions. A number of measures have been taken by the TGE in that road. These include:

- (1) Devaluation of the birr by 141.5 percent;
- (2) Restructuring the management of public administration, there by, sealing down the bureaucracy;
- (3) New labour laws; and
- (4) Exemption of duties and taxes on capital goods, spare parts, among others.

Moreover, Ethiopia has joined the World Bank's newest member body, the Multilateral Investment Guarantee Agency . The trend shows, from July 1992- December 9, 1994 1306 investors ( 1292 local and 14 foreign) entrepreneurs with a total investment capital of Birr 10 billion, has taken their investment certificates. This does not include those with investment capital less than Birr 500,000 and whose application does not get through Investment Office of Ethiopia(IOE) (IOE 1992).

Of the above figure, a total of 111 projects (8.5 percent of the total) with a capital of Birr 731 million have started production. 131 projects (10 percent of the total) have started project implementation activities. The sectoral decomposition indicates that, 552 ( 42 percent) are engaged in manufacturing 279 (24 percent) in agriculture, and 218 (16 percent) in real estate development. Although, the facilities needed for investment are not yet completely full filled, in line with the implementation of the rehabilitation and reconstruction programme, investment activities are encouraging.

Some signs of improvement have been witnessed in the export and import environment. The improvement can be justified from the registration, and issuance of certificates to 10,000 private entrepreneurs since 1991. But, still much more is expected from the sector to claim a success in this respect. Because, out of the 10,000 applicants, who received an export or import licence; only 300 exporters and importers have started their export and import activity.

The TGE 's new policies, and some of promotion mechanisms have shown encouraging results. The new economic policies and promotion mechanisms are also playing a significant role in revitalising the trade sector,thereby, to the development of export and import. Nonetheless, the export revenue or the trade imbalances have not shown significant change. This can be primarily d to the mono commodity structure of the export sector.

Expansion of export of existing commodities has been accorded the all time priority. But, the effect is not yet significant. The stagnation of the export sub sector recently has shown little improvement in volume. The diversification of commodities, and value added exports are a long way to be in effect. Export trade of non traditional commodities is changing for

the better, but has not yet reached a point to see export in the Ethiopian export structure. Nor, the effect seems significant; for, the export volume of each of these commodities is too small, to get a substantiative revenue out of it.

The export sector has flourished due to the culmination of all sorts of taxes on export items, except on coffee. Besides, the amount of import has also increased very highly. The cause for the increment of imports is due to increment of investment activities in the country (see table 13). But, the of the investment in the country's economy may not be in the near future.

But, there is one encouraging point. The influence of export on the overall economic structure is recognized, and acted upon more than ever. The government has given, now than earlier, more emphasis on the expansion of the export sub sector. Exports; now, are believed to have a significant impact on the country's economic development as an engine for growth. The idea of designing a good policy has been given due attention. The latter is attributed to the basic idea, if the trade policy is good; others are likely to follow, Such as, saving.

Many claim that, there is a better hope, and prospects for better investments, and subsequent development. The government of Ethiopia has announced time and again, that it will support all groups of investors, and ventures in the productive sector of the economy. Many investors are encouraged in the production of Import substitution and others in production for the development of Export.

In general, the performance of the export and import sub sector has not changed significantly during TGE. But, export is regarded as the back bone of Ethiopian economy. Nevertheless, the trade balance is still characterised by negative deficit. The continuous declining nature of the balance of payment has to be improved. Although, some measures that are centred at in the promotion of trade in general, and export and import in particular has been put to effect, still enough to be done till the deficit is reduced to zero let alone show a positive overall balance.

The creation of an enabling environment is under way. But, there is still a lag. The lag is in information. Decisions and policies should be information intensive. The export base and structure need to be designed, and made to absorb high changes in the international market. Changes should be absorbed, recorded, and analyzed. The development, and utilization of information support system in all spheres of the economy have been acknowledged and realised. In this regard, the development of an information support system has to get and given due importance. No time than now is a better time for the design and development of such an information system will assist in development of export and import in general and obtaining the utmost revenue out of foreign trade; consequently to sustainable growth and development.

### 3.3 FACTORS THAT HINDER THE DEVELOPMENT OF EXPORT AND IMPORT IN ETHIOPIA

The main objective of export trade is to reduce the state of foreign exchange deficits. While, that of import trade is to meet the demand of society through the importation of quality goods and services. The importance of exports and imports is aimed at improving the country's foreign exchange revenue, thereby, achieve a sustainable economic growth. Development of export and import will increase the share of the country in the world market, and reverse the domestic and foreign trade situation of Ethiopia. (See section 3.2) Despite the paramount importance of exports and imports revenues to the development of Ethiopian economy, the performance of the sub sector has been unsatisfactory, and disappointing (Getachew 1990)

In order to achieve a better result from the export and import sub sector, the sub sector needs to be promoted to function in a full gear. If the country seeks to attain a sustainable economic growth, the sector should be offered the utmost priority.

However, a number of factors hinder the efficient and effective performance of the sub sector not to function in its full year. These factors that contribute to the poor performance of both government and private export and import enterprises vary immensely in size. The problems encountered by export and import enterprises, which retarded, and affected obtaining the highest possible revenue from the foreign trade activity of the country, thereby, contribute to the poor performance of the sub sector and, there by, hinder the development of export trade and import trade in Ethiopia mainly include:

The factors that hinder development export and import in Ethiopia among others mainly include:

- (1) Excessive dependency on a few agricultural products, where price fluctuates, as well as declines over time;
- (2) Inadequate marketing strategies, and Lack of identification of trade opportunities
- (3) Control of trade and distribution by the government, and restrictive trade practices, which has hampered development in investment;
- (4) Inability to exploit existing markets; and introduction of new products;
- (5) Lack of adequate incentives, and motivation for export promotion;
- (6) Continued tariff; and other protection measures, which include subsidies in the industrialized countries which militate against African products, Ethiopia being not an exception in this respect;
- (7) Problems of ensuring competitiveness, arising largely from inadequate or inappropriate pricing policies;
- (8) Lack of adequate standardization, and quality control;
- (9) Unrealistic exchange rate policies; (Despite the fact that devaluation have been put into effect and there is auction of the dollar for purchases of items which are in the black list of the government, still the birr is over valued)
- (10) Excessive export duties;
- (11) Lack of an enabling environment for the development, and expansion of export and import; such as, long formalities and bureaucracy.
- (12) Export instability, due to a large, and unanticipated fluctuation in export earnings;

- (13) Limited range of labour intensive manufactured, and semi manufactured products,
- (14) Excessive dependency on export of limited number of items commodities;
- (15) Import of goods and commodities, which are mainly inputs to other economic sectors, there by, resulting more dependency on export;
- (16) Stagnation of exports, and increase in imports there by resulting in an over all negative trade balance;
- (17) Trade partnership with developed economies, thus the country is a price taker that fixer. That is, for commodities are destined only to few markets; there is difficulty in obtaining the utmost revenue from the system.
- (18) The decline in foreign exchange reserves, so as to obtain loans for necessary imports;
- (19) Policies of the government on interest rate;
- (20) Lack of expertise in international trade and finance;
- (21) Unfavourable land owning rules and regulations;
- (22) Absence of accurate statistical and other relevant information related to export and import;
- (23) High vulnerability of export to supply and demand. That is any short fall in domestic supply, and changes in market demand affects volume of export;
- (24) Unfavourable banking and insurance policies.
- (25) Amount of foreign exchange available for import;
- (26) Lack of awareness of customs rules, regulations, and tariffs on export and import items; by exporters and importers;
- (27) The duplicated and unsystematic efforts in building, and running export and import activities;

- (28) Deficiency of technical, and managerial capabilities; and readily access to international markets;
  - (29) Lack of awareness of the importance of trade promoting organizations;
  - (30) Lack of adequate export and import promoting organization;
  - (31) Absence or inadequacy of supply of domestically produced goods;
  - (32) Lack of adequate investment;
  - (33) Poor export Infrastructure (transportation, communication, etc);
- (Export or perish 1994; Getachew 1993)

### **3.4 TRADE AND INVESTMENT POTENTIAL OF ETHIOPIA**

So far as the basic resources are concerned, Ethiopia has all those that a country can be proud of. It has adequate man power resources, as well as natural resources. A World Bank study in the 1970s stated (EAL 1994) that the resources within its over one million sq.km area could comfortably sustain 150 million people, that is, three time its current population. The specific findings of this study are as follows:

- (1) Over 80 percent of the population derives its livelihood from agriculture. 65 percent of the Country's total area is arable. Of this only 15 to 20 percent of the arable land is under cultivation. The two Administrative Zones, Wollega and Gojjam, together have more well-watered cultivable land than Kenya. Ethiopia is first in Africa; and tenth in the world in its livestock resources. The sub sector holds considerable promise, particularly for exports.
- (2) Only two percent (1.2 billion Kwh/year) of the country's substantial hydro electric potential (60.0 million kmh/year) is being used and none of its known geothermal power potential are used. In addition, the contribution of the industrial sector to the

GDP is 13.4 percent. Compared to its potential, it certainly opens wide opportunity for investment.

- (3) Proven deposits of natural gas and associated liquids are estimated at 2.7 trillion cubic feet. The first development project, is now in progress; while exploration for oil is going on several regions.
- (4) There is already mining of Gold, tantalum, and platinum on a vary limited scale. Meaningful deposits of coal, Copper, Iron Ore, Nickel, Potash, Zinc, etc are known to exist.
- (5) Seven of its many natural, and man made wonders are listed by UNESCO as world heritage sites. Ethiopia's potential for a strong tourist industry is immense.
- (6) But, Ethiopia's greatest endowment by far is its industrious and tough people, giving it a large, and growing pool of trained man power.

The trade, and investment potential of Ethiopia is reflected through its large population, and abundant natural resources. But, the trade, and investment potential of Ethiopia which is reflected due to initial size, population, and natural resources may influence the timing, and pattern of early industrialization, and subsequent improvement in foreign exchange revenue, thereby, early economic growth. But, further progress along the path is greatly influenced by the government policies. Sustained economic development, could only be attained by a stable institutional, and macroeconomic environment; and domestic and foreign trade policies.

### **3.5 POLICY MEASURES AND ACTION MECHANISMS TAKEN TO PROMOTE EXPORT AND IMPORT IN ETHIOPIA**

To offset the adverse effects of export instability, it is necessary to adopt conducive policies that would facilitate the holding of adequate foreign resources, an easy access to international borrowing by improving credit worthiness, and/or intervention in commodity markets through international commodity agreements. The off setting measures are not, however, so much helpful in improving upon the prevailing export instability, apart from awaiting the immediate satisfaction of the foreign exchange needs of the country (Yohannes 1992).

The ever increasing flow of the illegal foreign trade and the lack of competitiveness lead to the deterioration of the quality and volume of the legal export. These problems are all due to the absence of conducive environment for export and import. Further, these are the unfavourable trade policies of the government which gets reflected in its exchange rates, interest rates, etc. The adoption of appropriate policies could, therefore, enable the country increase the volume of legal exports by diverting illegal exports into legal channels.

#### **3.5.1 Investment Incentives**

In order to promote investments and technology transfers, Proclamation No.15/1992 provides the following packages of incentives:

- (1) Exemption from payment of duties and taxes levied on import of capital goods, and equipment as well as spare parts up to fifteen percent of the value of the capital invested to import for investment purposes, provided however, that they are not available in the country in comparable quantity, quality and price;

- (10) Exemption from the payment of any tax on the proceeds from sales of assets upon the liquidation or winding up of the business of a foreign investor or enterprise due to bankruptcy;
- (11) Exemption from the payment of any tax of proceeds from the sale or transfer of shares of an investment or acquisition in part or in whole of an enterprise by a domestic investor;
- (12) Capital goods and equipment imported without the payment of duties and taxes levied on imports may be transferred to another investor having similar privileges under the investment legislation;
- (13) An investor, enterprise or expansion which earns foreign exchange may open and operate a foreign currency account in accordance with the regulations of the National Bank of Ethiopia; and
- (14) An investor, enterprise or expansion which earns foreign currency may retain a portion of such earnings as may be determined by regulations or directives of the National Bank of Ethiopia, and where foreign currency is not readily available by NBE, the earnings so retained may be used to acquire machinery, equipment, raw materials, spare parts and other needed supplies and inputs.

There are areas and sectors that are accorded eligibility for incentives to investors and requirements to qualify for incentives. If the requirements are met the manufacturer exporter or the importer distributor, or importers who help the above areas can make use of the incentives for the improvement of their export and import activities (TGE 1992).

### 3.5.2 Agency Representation

Exporting has been proved to be a difficult venture which requires too much efforts in order to enter into a well-developed and competitive international market. One has to get and have a foothold for one's own or the country's product for export. The process becomes a very difficult task, if the exporters need to export from a developing country, the products of which are mainly primary commodities, and are less likely to be competitive in a foreign market. The causes of such difficulties are many. Important among those are the:

- Deficiency in Quality;
- Poor and inadequate packaging and labelling experiences;
- Prices of export items;
- Absence of service facilities; and
- Distance between the two parties.

Then there is the lack of information about the buyers standard specifications; or about the potential of the buyer to get a credit. Many exporting enterprises have a very low capital to run the business.

In such circumstances, being represented by an agent helps significantly. The Ethiopian Chamber of Commerce tried to promote exports of Ethiopia by putting an agent representing the exporters of Ethiopia in eight different places overseas. These overseas agents supplied detailed information about the products in which an Ethiopian exporter or importer is interested, and intends to will promote the export or import. Agency representation has been proved to be effective means for promoting export and import of a company. It helps :

- (1) In securing a firm standing for the export products in the otherwise inaccessible foreign market.
- (2) Supplying the exporters with market information on market areas and opportunities, and on the activities of competitors.
- (3) In informing the final users of the product about the potential of the market when necessary, and about the product adaptation.
- (4) In assessing buyer's and supplier's reaction, that is, in getting a feed-back information.
- (5) In giving manufacture exporters the information on controlling market operation.
- (6) In strengthening the existing market potential on behalf of exporters and importers by introducing the producers and by selling their products. Obviously export and import will develop.

### **3.5.3 Outward-Oriented Trade**

The policy of import substitution has been found to be inappropriate in Ethiopia. This goes with the proposition that, in the early stage of development, the engine of growth depends largely on the expansion of primary commodity exports. This is often experienced by low income countries in general, Ethiopia being not an exception. The idea is that as Ethiopia enters the take-off stage, the pattern of production shifts away from primary products, and it advances towards consumer goods and import substitution, depending more on the expansion of the domestic market for own products. Hence, the dependence on exports decreases. However, as the economy approaches the end of the take-off stage, the domestic market becomes increasingly saturated, and it becomes unable to accommodate further expansion. Thus economic growth becomes, once again, dependent on export performance (Yohannes 1992).

### **3.5.4 Privatization and Price Liberalization**

Parastatal bodies in the trade sector are now being privatized in Ethiopia. The sale of a number of trade enterprises have been made. The retail sale corporations have become the major trade areas. A number of other enterprises in the sector for sale are on the line. Price liberalization has now come into effect in main areas. Price control of commodities has been abolished. A market economy has been introduced in Ethiopian trade environment. It is expected that the mechanism will improve the competitive capacity of exporters and importers.

### **3.5.5 Trade Fairs and Exhibitions**

Exhibitions in general and trade fairs exclusively are used for the purpose of trade promotion. Trade fairs usually centre round a particular type of product or commodity. Trade fairs organized in countries, where the import is high contribute in the efforts to improve trade imbalance.

A trade fair exclusively and exhibitions at large bring altogether a large number of buyers and sellers. They offer exceptional opportunities for assessing company designs, quality and standards of identical products. Trade fairs save importers from carrying out market surveys. The exporters get the opportunity to introduce their products in new markets.

Buyers, sellers and agents come face to face and can discuss about the quality, quantity of production, export or import capacity, and potential of a market. In short, the exporter or seller can get a feed back from possible and potential buyers on the spot about their

products or commodities. A producer manufacturer or exporter comes to know about his competitors, and other producers along with the prices, qualities, and designs of their respective products. In addition he comes to know about their market promoting techniques.

Trade fairs also assist private entrepreneurs in avoiding or minimizing the risks involved in entering into an unknown territory. Publications or similar other supplementary and related works help to avoid confusion; and thereby, offer enlightenment, in regard to export-import issues.

### **3.5.6 Diversification of Exports**

Ethiopia's economy, as mentioned earlier, is primarily dependent on agricultural products. Some of the agricultural commodities are also the main foreign exchange earning products. The country is excessively dependent on a few products for its export. Moreover such commodities are very much sensitive to price fluctuation. The disbursement of International Trade Organization also has an effect on these commodities. Therefore, the country has to adopt a new strategy so as to earn a sustainable foreign exchange revenue and to improve upon it. The strategy includes activities relating to the promotion of exports of non traditional items. This can be achieved by playing an active part in export diversification drive. The traditional cash crops, such as, coffee, oil seeds and pulses, which contribute 80% of the total export revenue are facing a bleak future on world markets. The Ethiopian government has emphasised the diversification of exports by granting agricultural credits; by supplying appropriate equipment, by offering training; and by developing the appropriate infrastructure. In addition, the government is encouraging the private sector in producing non traditional items for export.

### 3.5.7 Expansion of Cash Crop Production

Considerable attention has been paid to the production of cash crops in Ethiopia. The cash crop expansion measures are now being implemented carefully. The former Ethiopian government planned an all round cash crop expansion measure, which had a negative impact on its economy. Overemphasis on cash crops results in the shortage of food crops. Though the mechanism may improve export capacity, it may result also in a value added or otherwise import of food grains. On the other hand, if one would have grown food crops instead of cash crops, it would have been cheaper for the country. Of course, incentives should be given to producers of high volume and high quality of all crops. An export financing scheme needs to be introduced to encourage exporters, who can develop innovative items and approaches for exports..

### 3.6 TRADE INFORMATION INFRASTRUCTURE OF ETHIOPIA

The resources that are available for the development of a nation are several, such as, human, financial, materials, and technological. It is said much of these resources got lost in the process of their utilization. One of the resources for this loss is the lack of information about their use. In this respect the information required is many-fold. (IDRC 1988).

The concept of information as a national resource for economic and social development has gained wide acceptance in Ethiopia in recent years. This has resulted in the drafting of a national information policy. (ESTC 1991)

### 3.6.1 National Information Policy of Ethiopia

"Information policy refers to the explicit actions taken by governments that define the guidelines along which the information system should operate and involve." (Montiulofl 1990). A national information policy is essential for ensuring local allocation of financial resources for the purpose of developing a national information infrastructure. One of its main function is to establish priorities for evaluating alternative development plans. It is also concerned with the definition of the principles and the criteria which will be used in evaluating alternative courses of actions regarding information systems.

It is obvious that information policy will dictate the priorities or the alternative areas for the development of national and sectoral information infrastructures. The priority that should be given to the different sectors is set by the policy. The need for a national information policy can not be viewed separately from the need for a national information system. The need for a national information system is founded on the premise that information is a vital economic input to the development of any country including Ethiopia. A national information policy which is part of a national development strategy will facilitate the acquisition, capture and dissemination of information for all development purposes.

Ethiopia still does not have a National Information Policy (NIP). A series of meetings and conferences were held to develop a draft information policy document. The Science and Technology Commission of Ethiopia (STCE) was the organization which proposed the policy document for discussion. The document had been enriched by participants from different developmental sectors. It was sent to the Prime Ministers office in 1991 for further action.

The salient features of the draft policy document are as follows:

- (1) It describes the importance of Science and Technology for the development of Ethiopia, and the need for scientific and technological information. It also discusses the need for a scientific and technological information system.
- (2) The policy document describes the general objective of science and technology information policy as " To guide, support and promote science and technology in Ethiopia." It also specifies the specific objectives of the science and technology information policy.
- (3) It sets priority relating to the strategies and programmes for the implementation of the NIP.
- (4) It suggests the establishment of a Science and Technology Information and Documentation Centre (STIDC) under the STCE. It also suggests that the Centre should serve as the nations power-power-house of science and technology information.

However, the draft was not approved by the Council of Ministers. This has been responsible for the low level of development of the adequate information infrastructure for the country. After the change in the government, the issue of the NIP was raised again. Discussions were made among officials of the government and experts in STCE on the changes that would be needed to be made in the policy document with the change in the policy of the government. Later, it was agreed that the development of sectoral information policies should get priority. But, still this could not be implemented. Because, it was

impossible to prepare sectoral information policies in the absence of sectoral development policies. For instance, it is impossible to design an " Agricultural Science and Technology Information Policy" in the absence of a " Policy and Strategy on Agricultural Science and Technology."

Both the national information systems and services ( actually the national science and technology information systems and services will serve as a national information system and service) and sectoral information systems and services are incorporated as directives in the policy and strategy for science and technology, and policy and strategy on sectoral policy respectively.

A responsible officer in STCE explained to the researcher that, there were two situations which did not allow the setting up of a NIP at this stage. The first was the prevailing economic condition of the country. And, the second was the main objective of setting policies itself. The importance of policies was mainly to get due recognition from the government and other donor organizations. The recognition is accorded. Thus, if they could get results from the sectoral information systems and services in the utilization of the capital fund allocated to them in their information work and services as per the directives, then they could write the policy later. If they could develop the awareness they would not need much time in designing a policy framework. But, if they would fail, and policy design would become the absolute solution then they would draft it by then. He commented currently we are getting better results from the directives relating to the different sectors.

### **3.6.2 Directives on Information Systems and Services**

The directives in the sectoral policies regarding sectoral information systems and services are found in every salient feature of the each of the sectoral policies. The national and sectoral policies include the general and specific objectives, the priority programs, and strategies and organizational structure for research and development of each sector.

Although, there is no NIP, the Policy and Strategy on Science and Technology in Ethiopia (PSSTE) states the following directives within the policy framework of PSSTE about scientific and technological information systems in Ethiopia. The salient features of the directives about the national information systems and services are the following:

#### **General Objectives**

- (1) To guide, co-ordinate, support and promote science and technology in the country.

#### **Specific Objectives**

- (1) To establish a system that facilitates the coordination of science and technology activities in the country;
- (2) To enhance and encourage selection and transfer of technology;
- (3) To create public awareness about available research results and to promote the culture of consuming research results by the people.

#### **Priority Programs**

- (1) To create of an information network in science and technology.
- (2) To establish a system that will enable the collection and dissemination of science and technology information.

- (3) To raise the awareness of the public about available research results and promote the culture of utilizing research results.

### **Organizational Structure of the Research Centre**

- (1) To organize a system that is capable to collect, deposit and disseminate sectoral research information; and
- (2) To establish a system that facilitate the coordination of research, development, the transfer of useful research results to users.

The newly adopted science and technology policy incorporates four sectoral policies. The selection of the sectors is based on the priority set by the government currently. The sectoral policies are as follows:

- (1) Policy and Strategy for Health Science and Technology for Ethiopia.
- (2) Policy and Strategy for Agricultural Science and Technology for Ethiopia.
- (3) Policy and Strategy for Industrial Science and Technology for Ethiopia.
- (4) Policy and Strategy for Environmental Science and Technology for Ethiopia.

According to STCE, the national science and technology information systems and services is to serve as the national information systems and services. The overall policy and strategy for science and technology has incorporated within it the sectoral policies and strategies pertaining to different sectors recognized by it. Each of these sectoral policies is to incorporate as directives the sectoral information systems and services. The formulation of the sectoral information systems and services are incorporated in the overall policy and strategy for science and technology.

The responsible officer in STCE, who kindly allowed the researcher for an interview, was kind enough to explain the scope of information systems and services in each of these recognized sectors. In response to my query about information systems and services for Ethiopian trade, he replied that it forms part of the information systems and services for industrial science and technology sector. He explained that the logic behind this is that, information systems and services in industrial science and technology sector can not be complete without the information systems and services for Ethiopian trade. On the basis of this explanation, it is possible to conclude that the information systems and services for Ethiopian trade sub sector has already been recognized by PSSSTE. Another reason for this conclusion is that the determination of the scope of information systems and services in each recognized sector has been left to the care of the authorities made responsible for the development of the concerned sector. Of course, it has to be admitted that no specific statement about information systems and services for Ethiopian trade has been incorporated in the policy document.

The indirect recognition of the need of information systems and services for Ethiopian trade and commerce play a very significant role in the development of the country; and it has been recognized by the government of Ethiopia. It may be noted that a policy is only a means a means that is geared at institutionalization of a new idea. Once it is institutionalized it is up to the institutes to strive and put maximum effort to obtain the maximum benefit out of it. Corresponding to this line of thinking, it is possible for us to identify the organizations and institutions which have been made responsible for rendering information services on Ethiopian trade and commerce to contribute to the development of Ethiopian economy.

### **3.6.3 Organizational and Institutional Infrastructure for Ethiopian Trade and Commerce**

There are quite a few organizations and institutions in Ethiopia which have been made responsible to render information services on Ethiopian trade and commerce to the users who are interested in the sub sector. In order to satisfy these conditions each of these organizations and institutions now does have a cell to carry out this function. Of course, it is true that the dimension of such a cell has not yet taken the shape of a full fledged information centre as commonly understood in each of these recognized institutions or organizations.

The following are the recognized institutions and organization at the moment.

- (1) Ministry of Trade of Ethiopia;
- (2) Ethiopian Chamber of Commerce;
- (3) Investment Office of Ethiopia;
- (4) Central Statistical Authority of Ethiopia;
- (5) Ministry of Industry of Ethiopia;
- (6) Addis Ababa Chamber of Commerce;
- (7) Ethiopian Standardization Authority;
- (8) Maritime and Transit Corporation of Ethiopia;
- (9) Ethiopian Air Lines;
- (10) Ethiopian Customs Authority;
- (11) National Bank of Ethiopia;
- (12) Ethiopian Freight Transport Corporation;
- (13) Ethiopian Shipping Lines; and
- (14) Commercial Bank of Ethiopia;

However, only some of these organizations and institutions render direct trade information services. Others produce or have access to information that are needed by export and import information seekers. Both the types of information and the service level in these organizations and institutions vary significantly. The groups of users that use the systems are also different. Only six of these organizations and institutions carry out direct trade information services. They do have the rights, powers, duties and responsibilities of collecting, technical processing, storage, and retrieval of trade information. The following are those organization and institutions:

- (1) Ministry of Trade of Ethiopia;
- (2) Ethiopian Chamber of Commerce;
- (3) Investment Office of Ethiopia;
- (4) Central Statistical Authority of Ethiopia;
- (5) Ministry of Industry of Ethiopia; and
- (6) Addis Ababa chamber of commerce.

Once again it is necessary to point out that the functions performed by these organizations and institutions vary considerably. the primary reasons for this variation are the differences in their capabilities in terms of finance, manpower and technical and technological support.

The extent of these resources in these organizations and institutions, and the different types of information services that are offered by the information systems of these organizations and institutions are covered in Chapter 4 of the thesis.

### 3.6.4 Information Technology

The task of taking note of the existing information infrastructure pertaining to any specific sector of information systems and services in any country should necessarily be carried out with reference to and in the light of modern developments in the field of information activities all over the world. Modern development in this field are largely a contribution of the machines and equipment which are products of advances in modern information technologies which have been identified and used as appropriate for this purpose include the following:

- (1) Computer technology including its hardware and software;
- (2) Telecommunication technology;
- (3) Network technology;
- (4) Storage technology; and
- (5) Graphic technologies, such as,
  - Reprographic technology; and
  - Printing technology .

The extent of utilization of information technology in carrying out their professional and administrative activities relating to information services in the aforementioned organizations and institutions vary significantly. Only two of the above organizations use computer technology. These are the Ministry of Trade, and the Investment Office of Ethiopia. All the organizations do utilize telecommunication technology. All have telex, facsimile, and telephone equipment and facilities. Only the Ministry of Trade has a local area network. Except for the software used by the IOE the storage capacity of the machines in IOE and

Ministry of Trade are more or less the same. But, the Ministry has more terminals than IOE. All do have reprographic machines, but they use it only for internal purposes. Printing facility is available only in the Ethiopian Chamber of Commerce.

It is possible to conclude that, trade information services and products in Ethiopia in general encounter infrastructural constraints. The constraints are both in the organization and execution of research and development activities, as well as the infrastructure for the dissemination of trade information services and products.

It is true that there are quite a few trade information service facilities in Ethiopia at this point of time. But, that does not imply a guarantee about the solution to all problems pertaining to trade information services. The reason for this is that all these service facilities suffer from inadequacy in many respects the main reason for this is that the financial, material, and human resources available for carrying out this service is still quite inadequate so far as the demand for these services is concerned. Perhaps, this is due to the fact that no explicit statement about trade information services has not been incorporated in PSSSTE referred to earlier sections. That the Policy covers trade information also is based on interpretation only. But, it has to be admitted that this interpretation has been accepted indirectly. Otherwise, all the organizations and institutions mentioned above would have not been so conscious about rendering of trade information services to interested users. In addition, perhaps it may be mentioned here that the practice of private trade information services is not yet in vogue in Ethiopia as it is experienced in many other countries both developed and developing.

### 3.6.5 Conclusion

In conclusion we can say that the trade information infrastructure of Ethiopia has been a developing one. The trade information infrastructure needs to be upgraded and/or restructured wherever warranted. The country can only get a better revenue from its foreign trade activity, only if there is a well developed information support system for export and import in Ethiopia, which is at the moment lacking. The development of a computer based information support system for export and import in Ethiopia can be considered as a major step in the process of upgrading the trade information infrastructure of Ethiopia.

## CHAPTER 4

### ORGANIZATIONS AND INSTITUTIONS ENGAGED IN PROMOTING THE DEVELOPMENT OF EXPORT AND IMPORT IN ETHIOPIA

#### 4.0 INTRODUCTION

The performance of the foreign trade sector of Ethiopia has never been satisfactory. The country has a very high potential for investment and subsequent development. Better revenue from the foreign trade sector is unthinkable in the absence of a well structured trade infrastructure. But, we have seen that the trade information infrastructure is not satisfactory enough to help the planning for a better foreign trade structure.

The economic development of the country is the topmost priority in Ethiopia. The development efforts of Ethiopia have been focused towards the two basic objectives: (1) the rapid economic growth of the country; and (2) the reduction of the number of people leaving in absolute poverty as quickly as possible. Rapid economic growth, and reduction of poverty are interlinked. The lower the standard of the economy of the country, the higher the number of its people living in absolute poverty. Ethiopia has to improve the standard of its economy as a measure for the reduction of its poverty.

With all its resources Ethiopia is categorized as one of the low income economies of the world. However, economic development is not merely an outcome of the national resources within the boundary of a nation. Special action programs to improve the quality of life of the poor, has now become an integral part of the development strategy of Ethiopia. One of such strategies that Ethiopia has adopted is to plan and take actions to

accelerate the sustained growth of its economy. In order to come out of poverty the country has set plans and put an all rounded effort to improve the outputs of the different sectors of the economy. The foreign trade sector is one of the main sectors that needs to be given the utmost importance and priority in Ethiopia. Under the prevailing economic situation, the contribution of the trade and commercial sector to the development of the national economy is immense. Nevertheless, the contribution that is expected from the foreign trade sector of Ethiopia has not been as it should be. The country has to develop its export capacity to achieve its economic growth leading to sustained economic development.

The low level of development of the trade information infrastructure in Ethiopia is to be improved upon to help the foreign trade sector generate the foreign exchange necessary for the development of its economy. The necessity to export for the well being of a country is not disputable. The need is far greater in developing countries, like Ethiopia. The development of an economy brings at its wake the need for increased imports in the form of capital goods, technology, and infrastructure for the creation of services. All these need payment in foreign exchange, which has to be earned largely through exports. "Export or perish," a slogan adopted by many developing countries, is intended to earn the much needed scarce foreign exchange for the development of other sectors.

Therefore, the utmost priority given to export and import in Ethiopia is founded on the premise that, export and import are presumed to be the engines for a sustained economic growth and development of Ethiopia. This Chapter is to take note of the objectives, functions, structures, and services of the organizations and institutions engaged in promoting export and import in Ethiopia.

#### 4.1 THE NEED FOR A TRADE PROMOTING ORGANIZATION

The complex legal, and financial nature of export business, is very frightening for many entrepreneurs to enter into export and import activities. Due to this, many producers in Ethiopia, prefer to trade at home, where products of a lower quality than those acceptable in a highly competitive international area, may be marketed.

It is true that the international market is ruthless, selective and furiously competitive. Selling especially manufactured products in the highly sophisticated markets of the developed countries is difficult. In general, penetration into a new market is not an easy task. And it is even more difficult in a market conquered by goods of developed countries.

Many export enterprises suffer a variety of handicaps in attempting to enter into an export field with products, which are competitive in price and quality. The lack of technical know-how and equipment; inadequate knowledge of the techniques of international marketing; and poor facilities for quality control, and of attractive packaging-- all add to the problems of manufactured export goods. Besides, the absence of a well organized export centre with wide overseas contacts, limitations of finance, and ignorance about the changing needs and tastes of the foreign markets-- all points to the necessity for a trade promoting organization. Such a trade promoting organization which has the necessary capability to assist in the full exploitation of the export potential that exists, is essential. Such an organization should perform the following functions:

- To promote export and import;
- To promote best trade practices;
- To Promote the diversification of export and import markets;

- To control, monitor and improve export and import techniques ;
- To analyze fluctuation of commodity prices;
- To improve export of non traditional export commodities;
- To supply information on companies and potential exporters and importers;
- To enhance participation in both domestic and foreign trade;
- To render advisory services; and
- To gather, classify, and disseminate current local and international trade information.

The benefit obtained from the presence of a trade promoting organization can be well recognized from the experience of other countries. Information about the trade promoting organizations are furnished in the succeeding sections.

## 4.2 MINISTRY OF TRADE

### 4.2.1 Establishment

The Ministry of Trade (MOT) Ethiopia, was reestablished under the TGE's new decree to establish the objectives, powers and duties of the different ministries in Ethiopia. (Proclamation No. 4/1993) It was set as a ministry to ensure the development of both domestic and foreign trade in Ethiopia. The ministry is the sole organization with the power of issuing trade licences in Ethiopia. In accordance with the policy of the Ethiopian government, the ministry has the responsibility to register, licence, revoke, cancel, and regulate any person or organization engaged in trade activities.

#### 4.2.2 Powers, Duties and Responsibilities

The Ministry of Trade, Ethiopia, has the following powers and duties (TGE 1993):

1. Formulate policy and strategy to regulate trade activities of the country and, upon approval, follow up and supervise their implementation.
2. Prepare and submit draft laws concerning the regulation of trade activities and, upon approval, their enforcement.
3. In co-operation with the appropriate organs issue and follow up and supervise the implementation of directives relating to the proper distribution within the country of basic commodity and services.
4. Undertake studies relating to basic commodities and services that have to be under price control and, upon approval, follow up and supervise the implementation of the same.
5. Devise ways and means of expanding and promoting export trade and the proper handling of import trade.
6. Cause the organization of exhibition, within the country and in other countries, of the country's industrial, agricultural and other products and participate in exhibitions organized by other countries.
7. Issue licences to the supervising organizations and persons engaged in foreign trade as well as foreign investors engaged in any trade activity.
8. Organize and administer a central commercial register.
9. Undertake studies relating to and collect, compile, and disseminate information on the country's trade activities.

10. Provide professional advice and assistance to regions relating to market studies, collection of data, registration of traders and other related matters.
11. Encourage the establishment of chambers of commerce; give assistance to the chambers of commerce established at the national level.

#### 4.2.3 Trade Oriented Activities

The Ministry of Trade offers some trade information services in line with the powers, duties and responsibilities set for it by the government.

- (1) On request, it provides information about potential exporters and importers in the Common Market for East and South Africa (COMESA) region through its computerised information system. The database is acquired from The Trade Information NetWork (TINET) Database on CD-ROM.
- (2) It provides statistical trade information on the amount of export, value of export and import, destination of exports and sources of imports through its periodic reports on major export-import items.
- (3) It publishes highlights on the current policies from time to time.
- (4) It prepares price indexes.
- (5) It organizes seminars, conferences and meetings with traders of all types, and informs traders on the different agreements made with foreign governments.

#### 4.2.4 Market Oriented Activities

The Ministry of Trade has to carry out some market-oriented activities. The Ministry causes the organization of different trade exhibitions and trade fairs within and outside the country. The trade fairs, exhibitions, and conferences held outside the country help to get a market survey about various aspects of export interest. It also helps to study the competitive ability, and evaluate the capacity of export and trade routes.

The Ministry of Trade has trade promotion and information centres in USA, Japan, England, East Germany, Saudi Arabia and Republic of Djibouti. In these places there are well-trained persons who work as agents of the Ministry to promote the products of different enterprises within the country. There are also commercial attaches in the Ethiopian embassies in some countries. These attaches carry out market surveys in those countries. On the basis of the results of those surveys, the country decides about its export to or import from those countries.

#### 4.2.5 Libraries, Databases, and Publications

The Ministry of Trade has a Data Processing and Disseminating Division (DPDD). The division consist of: (1) the Library Section; (2) the Computer Section; and (3) the Publication Section. DPDD functions under the MOT's Planning and Policy Department.

It has the following facilities and information technology machines.

1. Eleven Microcomputers;
2. A Dot matrix printer and a Laser printer;

#### **4.2.4 Market Oriented Activities**

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It has the following facilities and information technology machines.

1. Eleven Microcomputers;
2. A Dot matrix printer and a Laser printer;

3. An Uninterruptable Power Supply (UPS) facility; and

4. Databases.

DPDD has two different library and documentation centres. Both of them are understaffed. Currently, they have only one person working in both the centres in two different shifts. In addition, it is not adequately financed. The library's collection of recent publications is not satisfactory.

The information contents of the databases in the computer section consist of the profile of exporters in COMESA region. The number of personnel in DPDD information system are only four. From time to time reports and different market news are published by MOT.

#### 4.3 THE ETHIOPIAN CHAMBER OF COMMERCE

##### 4.3.1 Establishment

The Ethiopian Chamber of Commerce (ECC) was established in 1978, as per the Proclamation No. 148/78. ECC has its own juridical personality and is set to ensure the development of trade, industry and commerce in Ethiopia (ECC 1990).

#### 4.3.2 Objectives

The Ethiopian Chamber of Commerce has the following objectives:

- (1) To ensure the advancement of industry and commerce in Ethiopia;
- (2) To render information services to its members; and
- (3) To establish friendly relations with the chambers of commerce in other countries;  
and
- (4) To publicize the country's products and services in foreign trade markets.

#### 4.3.3 Powers, Duties and Responsibilities

The Ethiopian Chamber of Commerce has the following powers, duties and responsibilities (PMAC 1978):

- (1) To find foreign markets for national products;
- (2) To exchange information with chambers of commerce of other countries;
- (3) To organize and participate, with the permission of the Minister of Trade, in exhibitions and seminars;
- (4) To participate in international conferences and seminars related to its purposes, powers, and duties;
- (5) To settle, when the parties so request, by way of arbitration, disputes arising out of business transactions;
- (6) To conduct studies on matters pertaining to the betterment of export products;
- (7) To undertake studies concerning trade constraints;

- (8) To make members aware of the appropriate government policies, regulations, directives, practices and techniques which have bearing on their and its activities;
- (9) To prepare commercial gazettes, reports, and directories concerning trade;
- (10) To collect, prepare, and disseminate statistical information on the country's economic activities;
- (11) To issue, on request, certificates of origin and certificates of inspection for imported goods;
- (12) To translate, on request, commercial documents from one language into another;
- (13) To determine, in consultation with the Minister of Trade, the urban centres where city chambers would be established, and to establish the same;
- (14) To open and operate its own bank accounts; and
- (15) To enter into contracts with interested parties

#### **4.3.4 Trade Oriented Activities**

ECC performs from time to time the following activities for the benefit of its members:

- (1) It organizes national and international seminars, and conferences to make its members aware of the current government and international policies, regulations, directives, practices and techniques, which would have a bearing on its and their activities.
- (2) It provides forums where the government, the public, and private business organizations engaged in commerce, industry, tourism, transport, and other fields related to export and import, to come together and discuss their mutual activities, and relations; about their products; and also about the economy of the country.

- (3) It publicizes the country's export-products and commercial enterprises to foreign markets.
- (4) It replies trade enquiries arriving from foreign and local business organization.
- (5) It also disseminates vital and timely trade promoting information through its periodic trade bulletins to both local and outside users.
- (6) In addition, it has the following means of disseminating information to the business community:
  - Information Desk;
  - Permanent Exhibition Hall; and
  - Documentation Centre;

It may be noted that several of its activities are related to rendering information services.

#### **4.3.5 Market Oriented Activities**

The main market oriented activity that is carried out by ECC is the search for market areas for Ethiopian commodities. This is being done by participating in trade fairs and trade exhibitions in foreign countries. The participation in trade fairs and trade oriented exhibitions by ECC in the past three years, has initiated and increased the export of many non-traditional export items.

#### **4.3.6 Libraries, Databases, and Publications**

The Ethiopian Chamber of Commerce does not have its own computerised information services. Of course, its efforts in this respect consist of its collaboration with the DPDD. ECC has quite a few publications. These include trade directories, trade journals, and

gazettes. Pamphlets and hand-bills relating to the organization of trade fairs and exhibitions are also published by ECC from time to time.

ECC exchanges published trade, economic, and statistical information with similar organizations, trade promotion centres, and information centres throughout the world. ECC has a library. It provides some trade information services to interested users. The library's main collection include a number of directories. These directories were acquired through purchase or exchange. These assist exporters and importers in identifying different potential market areas.

#### 4.4 INVESTMENT OFFICE OF ETHIOPIA

##### 4.4.1 Establishment

The Investment Office of Ethiopia (IOE), established under The Investment Proclamation No. 16/1992. It serves as a one-stop agency for facilitating foreign investments in Ethiopia. The IOE is responsible for the issuance of investment certificates, the approval of contractual agreements, and for granting incentives, and concessions. The IOE arranges also for other assistance, as may be required by potential foreign investors, at various stages of planning and implementation of investment projects.

#### 4.4.2 Objectives

The IOE has the following objectives:

- (1) To guide, promote, and co-ordinate investments;
- (2) To receive, review, screen, and decide on applications for the establishment or expansion of enterprises;
- (3) To approve the purchase or holding of shares in existing enterprises or the expansion of shares by foreign investors; and
- (4) To approve benefits from incentive schemes.

#### 4.4.3 Powers, Duties and Responsibilities

The IOE is responsible for carrying out the following specific duties and activities (TGE 1992):

- (1) To promote the inflow of foreign investment, and to receive and process applications for investments in Ethiopia;
- (2) To assist and co-ordinate in the establishment of business organizations involving foreign investments;
- (3) To issue certificates of approval with regard to foreign investments;
- (4) To assist foreign investors in selecting local partners in proposed investments;
- (5) To monitor implementation of foreign investment proposals and projects through periodic reports and analysis;
- (6) To examine and approve proposals for major expansion of enterprises involving foreign investors; and
- (7) To facilitate administrative and support services required by foreign investors.

#### 4.4.4 Trade Oriented Activities

IOE performs the following activities:

- (1) It provides foreign investors with the necessary information on government policies, priorities and procedures in Ethiopia.
- (2) It provides, as are required by foreign investors, information on cost, available material inputs, and available services in Ethiopia.
- (3) It provides foreign investors with the necessary information on project profiles.
- (4) It provides information on potential areas and sectors for investments and profits in Ethiopia.
- (5) It provides information on potential investors in some of the sectors, and their specific projects.
- (6) It identifies the areas and sectors that facilitate the transfer of technology and know how. and
- (7) It provides information about industries which are based on indigenous input resource based import substitution.
- (8) It provides information about industries which produce import substitutes.

#### 4.4.5 Market Oriented Activities

Sectors, which are expected to emerge as significant investment areas for new investments, and substantial expansion of existing facilities, are specially identified by IOE. In this regard, potential areas with a considerable scope for wide range of agriculture, agroprocessing, manufacturing, mining and service industries in Ethiopia have been already identified by IOE and the process of identifying other areas is still being carried out. It may be noted here that several of its activities pertain to rendering of information service.

#### **4.4.6 Libraries, Databases and Publications**

IOE publishes Investment Guides in Ethiopia. It has its own computer-based information service system, which collects data on investors in different areas. The information service system is undergoing restructuring. The databases are made up of profiles of investors and projects. They are created by using a Lotus 123 software. The number of personnel in the unit is too inadequate to run the system.

### **4.5 CENTRAL STATISTICAL AUTHORITY**

#### **4.5.1 Establishment**

The Central Statistical Office (CSO) was established in 1962. It was an autonomous public authority which was accountable to the then Planning Commission. From then the Central Statistical Office passed through different development stages. Through time, it improved its technical, and organizational capabilities along with its manpower. It contributed highly to the process of national development planning by providing valuable statistics on many aspects related to the country (CSO 1978). However, need was felt to get it restructured. In 1972, this consideration led to the establishment of Central Statistical Authority (CSA) in accordance with the proclamation No. 303/1972 (Negarit Gazeta 1972).

#### 4.5.2 Objectives

The objectives of CSA is to ensure that reliable statistical information is made available to the government and the people, so that wise decisions may be taken and valid inferences drawn about the current and future economy of the country.

#### 4.5.3 Functions of CSA

CSA performs the following functions:

- (1) To formulate and implement statistical programmes in conformity with the general priorities laid down by the authorities; and
- (2) To assist the sectoral and sub sectoral statistical offices in formulation and adoption of standards, and statistical methods, in conformity with the recommendations of the United Nations and other international agencies (CSA 1978)

#### 4.5.4 Trade Oriented Activities

CSA has a Trade Statistics Unit. The prime objectives of the Unit is to collect, process, compile and disseminate trade oriented statistical information. In relation to foreign trade

CSA provides the following information:

- (1) Statistical data on total volume of export and import;
- (2) Statistical data on total value of export and import;
- (3) Statistical data on Destination of export commodities and their volume;
- (4) Statistical data on source of imported goods and their volume;

(5) Statistical data on the balance of payments position of Ethiopia in respect of each of its trade partners; and

(6) Statistical data on the trade deficit of Ethiopia.

#### 4.5.5 Libraries, Databases, and Publications

The statistical information activities of CSA relating to several sectors, such as, those of population, and housing are carried out by using computers. But, unfortunately the activities relating to the trade sector is still being carried out manually. As a result the performance efficiency of the trade section of the CSA is very much restricted.

The authority compiles different trade oriented statistical publications. All the publications and statistical abstracts are compiled manually. Trade statistics related to foreign trade activities of Ethiopia are obtained in the form of the following publications:

- Statistical abstracts;
- Statistical reports, (specially relating to the manufacturing, agricultural, and service sectors, published quarterly and annually);
- Statistical data relating to the quantity of freight carried by Ethiopia Shipping Lines, and Ethiopian Air Lines. (The statistical data in these regards show a minimum of two year time lag).

The Authority has a Library from which interested parties can obtain statistical information relating to various areas. The areas which are of interest to the trade sector are the following:

1. National Income;
2. Agriculture;
3. Trade and Transport;
4. Industry; and
5. Finance including Banking and insurance

### 4.6.1 Establishment

The Ministry of Industry, (MOI) Ethiopia was reestablished, as per The Proclamation No. 4,1993, under the TGE's new decree to establish the objectives, powers and duties of the different ministries in Ethiopia. It was established as a Ministry to ensure and facilitate the expansion and development of large scale industries within the country. Apart from that, the Ministry is also responsible for issuing industrial and manufacturing licenses in Ethiopia. In accordance with the policy of the Ethiopian government, the Ministry has the responsibility to register, licence, revoke, cancel and regulate any person, organization, enterprise or industry (TGE 1993).

### 4.6.2 Powers, Duties, and Responsibilities

The Ministry of Industry, Ethiopia, has the following powers and responsibilities (TGE 1993):

1. To formulate the country's industrial development policies and strategies and, upon approval, follow up and supervise their implementation;
2. To initiate and cause the study and implementation of industrial projects that may enable to exploit natural resources, enhance industrial development, earn foreign exchange, and build the capability of science and technology;
3. To promote the expansion of industries, and facilitate the provision of assistance for the promotion of handicrafts and cottage industries;
4. To classify industries, issue licences, and supervise large scale industries as well as any industry established by foreign investors;

5. To collect, compile, and disseminate information on industrial development;
6. To examine and approve agreements concluded with a foreign party relating to the acquisition and transfer of technology and industrial patents; and
7. To establish, as may be necessary, research and training establishments that may assist the enhancement of industrial development.

#### 4.6.3 Trade Oriented Activities

The Ministry of Industry provides the following trade-oriented information services:

- (1) It functions as a liaison office between enterprises, and regional and international developmental information systems. The ministry acts as an information pool to enterprises, which would like to get information services and products from these developmental information systems and agencies.
- (2) It carries out information activities on quality production, and good packaging practices. These activities are meant for different small and medium scale industries. Seminars, conferences, periodical publications and pamphlets are produced by the Ministry or other organizations to reach the targets.
- (3) It publishes from time to time statistical data on products of different large, medium and small scale industries, and on their sales.
- (4) It communicates information on grants, and other vital information to interested groups.
- (5) It renders consultancy services.

#### 4.6.4 Market Oriented Activities

Trade fairs are the main types of trade promoting activities. Some conferences have also been used to assess markets for some of the commodities that are produced in the country. The Ministry is more of a place for promotion of production than promotion of trade.

#### 4.6.5 Libraries, Databases and Publications

The Ministry of Industry has a computer-based information centre. It was set up in 1985, with the assistance from the United Nations Industrial Development Organization (UNIDO).

The system maintains the following databases:

- (1) The database of the profile of employees in the 10 industrial co-operations;
- (2) The database of production and sales statistics; and
- (3) The database of industrial projects.

The computer system consists of one HP 3000 mini computer system with and 13 terminals. According to the views of the current employees in the system, the system is no more functioning.

The Ministry has a library and documentation centre. The number of documents in the library are not many; but the collection is valuable. The collection in the MOI's library consists mainly of working papers, thesis, proceedings of industrial conferences; and reports of the different manufacturing enterprises and of international industrial organizations.

At the moment, the library is engaged in converting its manually maintained bibliographic databases into its machine readable form. For this purpose the Ministry is using MINISIS. This conversion will enable then to conduct retrospective searches.

#### 4.7 ADDIS ABABA CHAMBER OF COMMERCE

##### 4.7.1 Establishment

The Addis Ababa Chamber of Commerce (AACC) was established in 1974, as per the General Notice No. 90/1947. The chamber was established for the following purposes: (1) to ensure the advancement of industry and commerce; (2) to render information to its members; and (3) to establish friendly relations with the chambers of commerce in other countries. In 1979 AACC was reestablished, when the Proclamation No. 148/78 was issued to provide for the establishment of a national and city chambers of commerce. At this stage, it became one of the autonomous city chambers ( AACC 1994).

##### 4.7.2 Objectives of the AACC

The Addis Ababa Chamber of commerce is set up to achieve the following objectives:

- (1) To provide forums where members engaged in commerce, industry, tourism, transport and other related fields to come together and discuss their activities, mutual relations and the economy of the country;
- (2) To provide forums to its members for training on the latest techniques and ideas in areas of their activities and related matters;

At the moment, the library is engaged in converting its manually maintained bibliographic databases into its machine readable form. For this purpose the Ministry is using MINISIS. This conversion will enable then to conduct retrospective searches.

#### 4.7 ADDIS ABABA CHAMBER OF COMMERCE

##### 4.7.1 Establishment

The Addis Ababa Chamber of Commerce (AACC) was established in 1974, as per the General Notice No. 90/1947. The chamber was established for the following purposes: (1) to ensure the advancement of industry and commerce; (2) to render information to its members; and (3) to establish friendly relations with the chambers of commerce in other countries. In 1979 AACC was reestablished, when the Proclamation No. 148/78 was issued to provide for the establishment of a national and city chambers of commerce. At this stage, it became one of the autonomous city chambers ( AACC 1994).

##### 4.7.2 Objectives of the AACC

The Addis Ababa Chamber of commerce is set up to achieve the following objectives:

- (1) To provide forums where members engaged in commerce, industry, tourism, transport and other related fields to come together and discuss their activities, mutual relations and the economy of the country;
- (2) To provide forums to its members for training on the latest techniques and ideas in areas of their activities and related matters;

- (3) To publicize the countries products and services to domestic and foreign markets;  
and
- (4) To establish friendly relations with chambers of commerce of other countries.

#### **4.7.3 Duties and Responsibilities**

AACC has the following duties and responsibilities (AACC 1994):

- (1) To organize and participate in trade related training and seminars;
- (2) To conduct studies relating to the improvement of the quality and quantity of commodities produced within the locality;
- (3) To undertake studies concerning trade constraints;
- (4) To make its members aware of the appropriate government policies, regulations and directives related to commerce and industry;
- (5) To prepare and distribute commercial gazettes and other publications concerning trade;
- (6) To collect, prepare, and disseminate statistical information on the economic activities within its jurisdiction; and
- (7) To translate, on request, commercial documents from one language into another.

#### **4.7.4 Trade Oriented Activities**

AACC conducts different seminars, training, and conferences to inform its members on possible new market, trade and investment areas as well as to discuss on points of common interest among the traders. AACC functions all the trade information activities as those carried out by the ECC except policy analysis.

#### **4.7.5 Market Oriented Activities**

AACC carries out all the market-oriented activities including market research, just as those carried out by ECC, restricting its scope with in the Addis Ababa region.

#### **4.7.6 Libraries, Databases and Publications**

The Addis Ababa Chamber of Commerce neither has a computerised library. Its computers are not used for rendering any information service. The Chamber publishes different journals and trade directories as a means of carrying out trade information services.

## 4.8 Ethiopian Standardization Authority

### 4.8.1 Establishment

The Ethiopian Standardization Authority (ESA) was reestablished in accordance with the Proclamation No 378/1987 (PMAC 1987). Earlier it was established in 1963 as the "Standardization Department" under the Ministry of Trade, Industry, and Tourism. The Authority is established to achieve the objectives of setting standards for the different products of the country. ESA has passed through a series of developmental stages to attain its current status. The effort of setting standards was started in 1962, when the Addis Ababa University (AAU) had faced a problem in identifying the types and qualities of electrical equipment and determination of water quality in relation to hygiene. With the development of Ethiopian exports and imports in volume and variety over time, the situation called for the establishment of a standardization team. The team was set up with the main objective of quality control of exports and imports.

### 4.8.2 Objectives

The principal objectives of the Ethiopian Standardization Authority are:

- (1) To provide a means of communication between the manufacturer and the customer; and to list the products which are available, their size and performance;
- (2) To limit the number of types and preparation of clear specifications, including performance and dimensions;
- (3) To promote the use of good " up to date" technology;
- (4) To provide acceptable and reliable standards for the consumer;

- (5) To promote the safety and health of its citizens; and
- (6) To facilitate international trade through reliable standards and quality control for export products.

#### **4.8.3 Power, Duties and Responsibilities**

The Ethiopian Standardization Authority has the following duties and responsibilities:

- (1) To promote quality control, and production of quality goods to ensure buyers benefits and right;
- (2) To control the quality of products for export, and act accordingly;
- (3) To prepare rules and regulations related to standards, measurements and prices; and
- (4) To set standards of products and correlate them with international standards.

#### **4.8.4 Trade Oriented Activities**

It produces and publishes small scientific and technological glossaries. It also provides, on request, information services on standards of some commodities and goods to export-import information users.

#### **4.8.5 Libraries, Databases, and Publications**

The Ethiopian Standardization Authority does not have a computer-based information system. However, it has a well-organized library and documentation centre with a collection of 132,500 books and bound volumes of periodicals. The Authority also has a permanent display centre, where it displays standardised commodities and goods.

#### 4.9 OTHER ORGANIZATIONS ENGAGED IN PROMOTION OF EXPORT AND IMPORT IN ETHIOPIA

Apart from the organizations and institutions mentioned above, there are some other organizations and institutions which also promote the development of export and import in Ethiopia. These organizations and institutions generate information that are very essential and vital for the efficient and effective performance of export and import enterprises. These organizations and institutions differ from the first set of institutions in that this group of institutions do not have a trade information service unit within their structure.

The following are some of these organizations and institutions:

1. Ethiopian Air Lines (EAL);
2. Ethiopian Customs Authority;
3. Ethiopian Shipping Lines (ESL); and
4. Maritime and Transit Service Corporation (MTSC).

These organizations have direct contact with the exporters and importers. However, the organizations and institutions do not render any type of trade information services. On the other hand, these organizations do support and promote the development of export and import in Ethiopia. Each of these organizations does have some sort of promotional packages for Ethiopian exporters and importers. For instance, the Ethiopian Air Lines do offers special fare arrangements, and special chartered cargo facilities for enterprises that are engaged in seasonal export of vegetables and fruits. The special promotional activity of EAL ensures an on time delivery of these perishable commodities at concessional fare. The Ethiopian Customs Authority does not as such have any trade information services for

exporters and importers. But, in line with their activity the customs personnel always advise importers to compute the tariffs and taxes before importation. In addition, it is the primary source of export and import trade statistics. However, the compilation statistics is carried out by others. The Authority only collects the primary data. The Maritime and Transit Services Corporation is also one of such organizations with a direct contact with importers and exporters but without a trade information service unit in its structure. The Corporation acting as a shipping agency provides transit services to the exporters and importers of Ethiopia. In addition, it carries out packaging, fumigating and warehousing services. Thus it promotes the development of export and import in Ethiopia.

The Ethiopian Shipping Lines also promotes export and import trade in Ethiopia by offering shipping services to the Ethiopian exporters and importers. It is the main cargo agent which provides for the carriers which transports Ethiopian commodities towards their destination by preserving the standard and quality of the commodities.

The quality, reliability and timeliness of the information that is generated within the above mentioned organizations is very high. The pieces of information that can be obtained from these organizations are usually about the following:

- (1) The cost of freight;
- (2) The routes of the freight with minimum fare;
- (3) The time of delivery of an exported or imported item;
- (4) List of ports;
- (5) Warehousing service availability;
- (6) The taxes levied on items; and
- (7) The list of items free from taxes.

As has been indicated earlier, these organizations and institutions do not render information services as it is done by the information service units of the other mentioned in the previous sections. But, they generate different items of pertinent information, relating to export and import in Ethiopia. These items of information are used by the organizations and institutions mentioned earlier. However, once an individual or organization becomes their client, it gets many items of information from these organizations which prove to be helpful for carrying out its day to day activities relating to export and import.

**CHAPTER 5**

**USER STUDY AND THE NEED FOR INFORMATION FOR  
EXPORT AND IMPORT**

**5.0 INTRODUCTION**

The task of designing an information support system for export and import in Ethiopia should be carried out in relation to the information needs of the users of export import information. Therefore, it is necessary to take note of the information needs of the potential users, and of the available trade information services. For this reason, it is necessary to carry out a User Study which is essential to identify the following:

- (1) To identify the potential users of the system;
- (2) To identify the types of information needed by users;
- (3) To identify the purposes for which these types of information are needed;
- (4) To identify the possible relevant sources of information;
- (5) To identify the forms in which these types of information are available;
- (6) To identify the types of information services and products available;
- (7) To identify the level of satisfaction of users offered by the existing information services;
- (8) To identify the problems that are encountered by these information service systems;  
and
- (9) To identify the types of information services expected from such a system by the potential users.

In addition, it is also essential to scrutinize thoroughly, how the system should render these information services.

The pieces of information were collected by using a set of appropriately designed questionnaire. Wherever necessary it was supplemented by the interview method. The responses received using these methods have served as essential inputs in developing the proposed information support system for export and import for Ethiopia. The necessary data were collected from the following groups of identified users:

- (1) Different business enterprises which are engaged in export and import activities;
- (2) Government officials in different positions;
- (3) Researchers; and
- (4) Personnel who work in some of the trade information service units of organizations which are engaged in promoting export and import.

The collected data was analyzed to find answers to the different pertinent questions. The results of the analysis have been summarised and furnished in this chapter along with discussion on the findings.

## 5.1 BASIC FEATURES OF EXPORT AND IMPORT ENTERPRISES

Export and import trades refer to the transactions involving commodities, goods and services that take place between nations. Currently, international trade transactions are valued about more than 4 trillion US dollars. These transactions are basically initiated and administered by export and import enterprises. These enterprises could be either public and/or private. Export and import enterprises have to make necessary decisions that will result in the transborder transfer of these commodities. These enterprises have got some special features. The basic characteristic of these export and import enterprises can be summarised as follows:

- (1) They are engaged in the transborder transfer of commodities, goods and services.
- (2) They are continuously engaged in scanning and analysis of environmental forces that affect their activity.
- (3) They are continuously engaged in programming and marketing mix.
- (4) They are also engaged in promotional activities.

Export and import enterprises interested in international trade must have a fair understanding of the international environment which affects their operations. Essentially, the challenge to these enterprises is to scan and analyze the various dimensions of the environment. The analysis is carried out to establish the opportunities that appear to exist, and to identify the available resources that could be mobilized to attain the objectives of the enterprises. The analysis is made also to identify the problems and/or constraints that might impede feasible transactions.

The environmental analysis by the enterprises seeks to establish the implications of forces that pertain to the economic growth and development of actual and prospective trading partners; their balance of payments position; and population characteristic and other economic indicators that influence international trade. They analyze also the ideology or beliefs of the governing authorities regarding the economic resources; the stability of the government; the national political climate, and all the national and international laws governing foreign trade.

As an essential part of the environmental analysis the export and import enterprises go on carrying out continuous and persistent examination of both local and foreign suppliers who supply the raw materials, capital, and labour for productive enterprises. They examine the

characteristics of major consumers and their implications for marketing strategy. They examine the activities of the distributors/dealers, and of their competitors, both local and foreign to identify their competitive strengths and readiness.

The term "programming and marketing mix" refers to the mix of considerations about the product, the price, and the place. The product or commodity constitutes the primary offering. This implies the offering of the value of the product which a seller can offer to a prospective buyer. In general, what is offered should be what is wanted. The price of the commodity is also important because it often influences demand. The price will depend on a number of considerations some of which are beyond the control of particular organisation. Place decisions deal with distribution strategies and systems to be used to facilitate the flow of the products to foreign markets. The decision about types of channel and physical distribution methods to be used are also the day to day activity of enterprises which needs serious managerial considerations of the enterprises.

Market promotion is another basic feature of export and import enterprises. "Market Promotion" refers to the different forms of marketing communications that become necessary for an enterprise to initiate in order to facilitate the acceptance and diffusion of its products into the foreign markets. Decision making regarding the relative effort to be allocated to advertising, personal selling, publicity, sales promotion and public relation is a major involvement that characterises export and import enterprises (Lwanga 1992)

## 5.2 USERS OF EXPORT AND IMPORT INFORMATION

For the purpose of identifying the users of export and import information, contacts were made with two distinct groups of persons. They were as follows:

- 1 The information professionals engaged in rendering information services on export and import. This group consists of professionals, such as, librarians, documentalists, programmers, and computer scientists. They were all engaged in rendering information services in the different organizations and institutions covered in Chapter4.
- 2 The experts engaged in rendering consultations or advisory services relating to export and import. This group consists of experts, such as, management consultants, economists, statisticians, marketing experts, and trade agents.

Both the groups come into contact with the users of export and import information. According to these two groups of persons the users of export and import information fall in the following categories:

1. Exporters and importers;
2. Researchers, teachers, and students;
3. Politicians and policy makers;
4. Manufactures, industrialists and construction companies;
5. Donor agencies;
6. Financial institutions;
7. Consultants and advisors;

8. Service sectors operators, such as, transport infrastructure designers; and
9. Experts in other fields than in the fields mentioned above.

Of course, in a sense, the information professionals and experts, already referred to are also users of export and import information. They can not carry out their professional activities without using such information.

### 5.3 ROLE OF EXPORT AND IMPORT INFORMATION

Exporters and importers in general do not possess perfect knowledge about each situation they face during their export and import activities. If they did, there would not have been any requirement for information services. In the more typical competitive situation faced by exporters and importers, they have less than perfect knowledge. Relevant trade information services provide opportunities to improve the responses to the foreign trade situation. Thus, trade information services have a broad role of enhancing the knowledge about export-import activities.

The role of export and import information in relation to the type of information provided to the different groups of users may be summarised as follows:

- (1) It reduces the uncertainty in decision making. It should be reorganized here that more information may add other positive outcomes to a situation not previously considered. Thus, it would increase the certainty.
- (2) It provides error signs which indicate reiterative activities. For instance, the result of the cost benefit analysis of an exporter may be used to decide about a change of his/her/their trade partners.

- (3) It provides a mechanism for the communication of plans, forecasts, procedures, and guidelines. For instance, information on the amount of imported items which drains the economy might help in the planning of an industrial or other activity to come up with an import substitution program.
- (4) It provides information about potential customers. For instance, the supply of historical evidence of transactions, level of performance, and results of decisions might help commodity producers to deal with such customers.
- (5) It reduces the complexity of export and import activities, through enhancing the knowledge and understanding of a trade situation by exporters, importers and other users of trade information.

### 5.3.1 Uses of Export-Import Information

The purposes for which different user groups use a piece of export-import information vary significantly. The choice in an area of information depends on its immediate use, the occupational status, the level of understanding, and intended objective of the export-import information to the potential users. The purpose for which a piece of export-import information is needed and used by different groups vary in many circumstances. The following table shows the different set of purposes for which a piece of export-import information is needed by three different categories of potential users.

TABLE 19

RELATIONSHIP BETWEEN USER OCCUPATIONAL GROUPS AND  
PURPOSES FOR WHICH INFORMATION IS USED

PURPOSE FOR WHICH INFORMATION IS NEEDED	USER GROUPS		
	BUSINESS P.	RESEARCHERS	POLICY M.
Back Ground Information	X	X	X
Economic Analysis	X	X	X
Financial Management	X	X	X
Education	X	X	X
Policy Decision	-	-	X
Planning	X	X	X
Profit	X	-	-

The intensity of use of a piece of export-import information varies from user group to user group, level to level, and time to time. Hence, it is difficult to associate a particular purpose of information to a particular user group. The purposes for which export-import information is used at different levels is discussed in the following sub sections.

**5.3.1.1 Uses of Export-Import Information at National Level**

The items of export and import information are needed at the national or ministerial level of Ethiopia for the following purposes:

- (1) To set priority in sectoral developmental policies;
- (2) To make sectoral budget allocation, as per the need to import materials from abroad;
- (3) To decide about the duties, taxes and other related legislations;

- (4) To formulate trade and commerce sectoral policies, strategies; programmes, and administrative rules;
- (5) To co-ordinate the different sectors of the economy. For instance, the development of the transport infrastructure can be coordinated with the trade sector for a better foreign exchange revenue.

#### 5.3.1.2 Uses of Export and Import Information at Sectoral and

##### Sub-Sectoral Levels

The items of export and import information are needed at the sectoral and sub sectoral levels of Ethiopia for the following purposes:

- (1) To develop trade policy of Ethiopia in general, and its export and import policy in particular;
- (2) To prepare and direct long and short term plans for Ethiopian trade and commerce in general, and its export and import in particular;
- (3) To change, improve, modify or restructure the export and import feature of Ethiopia, as a result the production feature of the country;
- (4) To control the standard of export commodities from Ethiopia, and import goods into Ethiopia;
- (5) To evaluate the sectoral and sub sectoral performances, and to make budget-allocation for all the levels;
- (6) To promote research and development field of trends in Ethiopia in general, that of its export and import in particular; and
- (7) To ensure the development of the trade structure in Ethiopia, and its trade infrastructure.

### 5.3.1.3 Uses of Export and Import Information at the Organizational/

The items of export and import information are needed at the organizational/institutional level for the following purposes:

- (1) Both local and international financial institutions and donor organizations, require export and import information to evaluate and then grant debts for expanding export and import activities; or to permit financing of sectoral development projects engaged in exports and other trade oriented projects, as well as to evaluate their performance.
  
- (2) Business organizations and institutions need information on exports and imports:
  - to assess market areas;
  - to set places for small manufacturing industries closer to their input;
  - to identify the costs of export and import materials and goods to supply for a better output;
  - to ensure their effective and efficient functioning;
  - to ensure their better management;
  - to ensure appropriate resource allocation and its utilization;
  - to adapt appropriate strategies for making profit and development;
  - to change or develop their infrastructure;
  - to render consultancy services in all policy matters; and
  - to develop appropriate mechanisms for data collection, processing and prediction.

(3) Researchers, and teachers use export and import information and data as inputs for conducting research work and curriculum development, and teaching. The students use it for their study.

### **5.3.2 Export-Import Information Seeking Behavior and Educational Background**

The study intended to find out whether there is a relationship between educational background of users of export and import information with their information seeking behaviour. What could be ascertained in this regard was only through interviews with the officials in ECC, MOT, and CSA. According to them, it is found that educated people concerned with trade information , such as, policy makers, planners, administrators, researchers, teachers, and students try their best to find relevant trade information by themselves. Only when they find it difficult they approach the information service professionals for help in this matter. This behaviour of the businessmen in Ethiopia, specially those who are involved in export or import are normally found to be quite aware of the importance of trade information in carrying out their business. But, in most of the cases their educational background is comparatively poor. It is found that they normally seek help for this purpose from the professional consultants. Normally they do not try to consult the documentary sources which may serve their purposes. In this matter they depend heavily on their consultants.

## 5.4 AWARENESS ABOUT THE EXISTING INFORMATION SERVICE UNITS

### 5.4.1 Awareness about The Existing Local Information Services Units

In order to ascertain the extent of awareness about existing local information service units, the identified users were requested to respond to the following questions: "Are you aware of the existence of the following information service units? If so, did you visit those units for seeking trade information during the past two years?" The following table furnishes data in this regard on the basis of the responses received.

TABLE 20

AWARENESS ABOUT AND USE OF LOCAL INFORMATION SERVICE UNITS  
IN THE DIFFERENT INSTITUTIONS IN ETHIOPIA  
(TOTAL NUMBER OF PERSONS CONTACTED IS 60)

INSTITUTIONS WITH INFORMATION SERVICES UNITS	USERS LEVEL OF USE AND AWARENESS	
	AWARENESS	USES
Ethiopian Chamber of Commerce	55%	22%
Addis Ababa Chamber of Commerce	5%	17%
Ministry of Trade	69%	4%
Central Statistical Authority	75%	25%
Ministry of Industry	12%	3%
National Bank of Ethiopia	38%	1%
Ministry OF NPED	30%	12%

The level of awareness of the available trade information service units and their information use level is not satisfactory. Therefore, the availability or existence of the information in this unit should be communicated at least to its potential users. In addition, the study revealed that, the level of use of trade information in these trade information units in relation to export and import activity is not satisfactory.

#### **5.4.2 Awareness about the Existing International Trade Information Services Units**

In reply to the question, " Are you aware of the existence of any international information service units relating to trade information? " Many of the respondents answered yes to this question. But, it was found that they used the foreign trade agents. But, some of them were found to be aware of the existence of the International Trade Centre, Geneva. On the basis of this data it may be concluded that the awareness about the existence of international information service units relating to trade information is of low level.

#### **5.4.3 Awareness about and Utilization of the Foreign Based Agents of the MOT and Commercial Attaches of Ethiopian Embassies Abroad**

It has been mentioned in Chapter 3 that one of the foreign trade promotion mechanisms consists of agency representation. MOT has 8 Trade Agents around the world. The exporters and importers ( Total : 60) were inquired about their awareness of the existence of foreign based MOT Agents. Only 21 percent of the respondents stated that they were aware of the existence of these Agents. But, 2 persons of the total know their actual functions. Only 1 person from the respondents made use of the Trade Attaches of Ethiopian Embassies to sign agreement of trade and cooperation.

## 5.5 ADEQUACY OF INFORMATION SERVICES

Opinion of 60 users were collected about the level of their satisfaction about the trade information services that were rendered by the existing information service units. They were asked to rate in terms of " Excellent ", " Good ", " Adequate ", and " Poor " information services in relation to their quantity, quality, currency, cost and content. The opinions of the exporters and importers are summarised below.

TABLE 21

LEVEL OF SATISFACTION OF USERS IN RELATION TO THE BASIC CHARACTERISTICS OF TRADE INFORMATION IN THE TRADE INFORMATION UNITS

SATISFACTION ABOUT	SATISFACTION LEVEL			
	EXCELLENT	GOOD	ADEQUATE	POOR
Quantity	8.7	13.4	21.2	59.7
Quality	8	8	14	70
Currency	-	9	21	68
Cost	-	-	47	-
Content	12	9	33	46

## 5.6 MECHANISMS AND MEANS OF GETTING TRADE INFORMATION SERVICES

Data , from all of the trade information centres, are obtained by users through personal contacts. Some materials are also distributed against membership. These include trade directories and journals. In all, except for CSA library official letter is necessary to get the requirement information. The databases in MOT is accessible to both the local and foreign investors. But, the database in IOE is accessible to the foreign investors. The mass media are used for the advertisements of private enterprises.

A number of documentary sources of information are produced locally. In addition books, monographs, product classification codes, and encyclopedias are mostly acquired through purchases. Some are obtained through exchange agreements with other libraries or information centres both local and foreign. The databases are, except for the database on profile of exporters in the COMESA region, usually locally generated.

## 5.7 LEVEL OF UTILIZATION OF AVAILABLE INFORMATION SERVICES

Opinions of information workers in the different trade information service units was asked about the level of utilization of the information that could be rendered by their service units. The level of utilization of the available information services, according to the professionals engaged in rendering trade information services, is inadequate. The professionals admit that the amount, quality and timeliness of the items of information available with them are not always satisfactory. But, the existing and available information services and products are not used extensively.

## 5.8 MECHANISMS OF ACQUIRING TRADE INFORMATION OR INFORMATION SOURCES

Many of the organizations and institutions generate a number of sources of information. The other sources of information in all of the trade information service units are acquired in any one of the following ways:

- (1) By purchase of the required sources of information.
- (2) By exchange of sources of information with any interested party.
- (3) Through gift from other organizations and institutions.

## 5.9 PROBLEMS ENCOUNTERED BY TRADE INFORMATION SERVICES

The problems encountered by the existing trade information service units in rendering information services are many. The degree and extent of the problems that are encountered by these units vary from organization to organization. However, all the organizations share many of these problems mentioned below.

- (1) Shortage of technical manpower;
- (2) Unavailability of training facility for the members of the staff in the use of computer and other requisite products of information technology;
- (3) Inadequate facility for domestic maintenance of machines and equipment;
- (4) Financial constraints to introduce modern information technology;
- (5) Lack of appreciation on the part of policy makers about the advantages of using information technologies;
- (6) Inadequate standardization manuals; and
- (7) Insufficient training opportunity to information personnel.

## 5.10 INFORMATION NEEDS OF EXPORT AND IMPORT INFORMATION

### USERS

Areas of export and import information requirement vary from one user group to another user group. For instance, a newly established export enterprise or a manufacturer cum exporter needs information on market areas. Government officials want to know the balance of payment position of the nation. Importers like to get information on exporters and their export-items, which they can import with minimum price with the assurance of better quality. Exporters of perishable goods like to know the flight timings and freight charges of a cargo plane. In general, the information requirements of different groups of users vary with place, and time.

A detailed list of potential areas of information requirements of the different groups of users is furnished below.

- Available transport facilities, such as,
  - \* Air freighting
  - \* Shipping and freight services
  - \* Train fares, and departure and arrival times
- Taxes and duties levied on exports and imports;
- Export and Import regulations;
- Export Import trade directions;
- Channels of distribution;
- Agent selection and agreements;
- Packing and packaging regulations;

- Export financing and foreign trade;
- Maritime rules, regulations and Marine insurance;
- Trade statistics;
- Country profiles and consumer habits;
- Local and international trade agreements;
- Trade fairs, missions of trade, and exhibitions;
- Basic market areas; techniques in marketing research and export market selection;
- Trade promotion organizations and trade incentives;
- Costing and pricing;
- Import Procurement;
- Exporters;
- Standards and quality control
- Experts on marketing techniques.
- Importers;
- Banking, insurance and other financial facilities;
- Market channels;
- Trade promoting agents;
- Consultants;
- Advertising agencies;
- Product designs and designers; and
- Warehousing facilities.

## 5.11 TYPE OF SERVICES EXPECTED FROM AN EXPORT AND IMPORT INFORMATION SUPPORT SYSTEM

The opinions of 60 users about the types of trade information service that are expected from an export and import information support system is summarised in the following table.

TABLE 22

USERS OPINION ON THE TYPES OF SERVICE EXPECTED FROM AN EXPORT  
IMPORT INFORMATION SUPPORT SYSTEM

TYPES OF SERVICES	PERCENTAGE OF USERS IN FAVOUR
Access to Bibliographic and Factual Database	64
On Line Access to Information	80
Current Awareness Service	73
Selective Dissemination of Information Service	73
Retrospective Bibliographic Search Services	58
Advisory Service	91
Consolidation and Repackaging of information	69
Cataloguing, Indexing, and Abstracting	24
Reprographic Service	87

5.12 USE OF DOCUMENTARY SOURCES OF EXPORT AND IMPORT  
INFORMATION

The sources of export and import information used by the different groups of users in Ethiopia vary from one group to another depending upon their respective interest and purpose. For instance, coffee exporters use the Financial Times more often than the Trade Year Book for daily transactions.

The analysis of responses relating to the sources of export and import information revealed that there were no user-groups to use the bibliographies of reference works on Directories, Periodicals, and Statistical Sources. Some users use reference works like,

directories, hand books, encyclopedias, and year books. This group of sources of information are mostly used by business enterprises which are engaged in export and import trade.

International periodicals like the Economist, and Financial Times are used by exporters of some commodities, whose prices are volatile. For instance, some exporters of coffee use these periodicals to follow the market price situations of coffee in the world market. Publications of international organizations, such as, the World Bank, the IMF, OECD, GATT, UNIDO, FAO, UNCTAD are the most frequently used trade information sources mainly by researchers, economists and statisticians. The information in these publications are usually statistical data. The utilization of these international publications exclusively by the researchers is due to the time lag in publication of the materials which disclose the same type of information in the country. A researcher told that if one wanted to know about the volume of export in 1994 from Ethiopia to the European Community has to wait about two to three years. But, the same information can be obtained from the International Trade Statistics in one year.

Government publications are other sources of trade information. These consist of trade directories, such as, Addis Ababa Chamber of Commerce Trade Directory, and Ethiopian Trade Directory; of periodical reports of working groups; of trade journals like the Ethiopian Trade Journal, Nigdachin, Investment Guide to Ethiopia; of Conference Proceedings; of Gazettes like Negarit Gazeta;

News-Papers, like the Ethiopian Herald, Addis Zemen, Nigdna Limat. Some business organizations mainly importing enterprises use pamphlets distributed during trade fairs and other advertisements as their sources of trade information.

### 5.13 DISCUSSIONS

The analysis of the needs of the different trade information user groups indicates that the information services that are rendered by different organizations and institutions are not satisfactory in most of the time (Table 21). Much improvement is necessary to enhance the quality of their information services. The development of an adequately equipped computer base information support system for export and import may serve as a model to inspire all the existing systems to take necessary steps for ensuring their respective qualitative improvement in their service.

The analysis shows also that the problems that are encountered in rendering information services by the different trade information service units are many.

The problems of the different trade information service units and of their users can be summarized as follows:

- (1) The development of the information service units in different trade related organizations and institutions are not considered to be a priority by authorities concerned.

- (2) The export and import activities by themselves are extremely complex. Rendering of information services for such complex subjects calls for a high order of professional knowledge and competence.
- (3) The activities of foreign trade promoting agencies do not adequately emphasize the vital role of appropriate information services in this regard.
- (4) There is hardly any initiative in encouraging effective communications between the foreign trade promoting organizations on the one side and the exporters and importers on the other.
- (5) There is hardly any coordination relating to the activities of the different trade promoting organizations.
- (6) The lack of realization of the importance of export and import information in promoting foreign trade is reflected in the inadequate attention being paid in the collection of pertinent information, their technical processing, and their storage for generating, dissemination and retrieval services.
- (7) The duplication of efforts by different export and import promoting organizations result in unnecessary expenditure and resource utilization.
- (8) The lack of the availability of the minimum financial support gets related in the quality of information services rendered by the different information service units dealing with trade information.

- (9) Even in many cases, the interested parties appear to be not much concerned about the reliability of the information they seek; and they do not know where to seek such information.
  
- (10) Several of the interested parties have not yet been able to develop the conception that pertinent information at the right time can serve as a valuable resource to help them in carrying out their activities relating to export and import trade more effectively and efficiently.

Solution to these problems lies in the design and development of a well-equipped Computer-based information support system for generating appropriate information dissemination and retrieval services relating to export and import in Ethiopia. The use of the services rendered by such a system is expected to change the present state of affairs in the shortest possible time.

**CHAPTER 6**  
**PROPOSED SYSTEM STRUCTURE AND GENERAL SYSTEM**  
**SPECIFICATIONS FOR EIISE**

**6.0 INTRODUCTION**

Developing an effective information support system for export and import which accommodates the export-import information needs of the public in general and that of exporters and importers in particular is vital and timely. This is more important in the coming information age. The way of life is becoming information intensive.

The importance of trade information is even high in the area of international trade where prices are more likely to fluctuate over a small period of time. The importance of export and import information can be seen by the series of problems exporters, importers, policy makers, and researchers are facing due to the lack of an information service. decisions made without information support resulting in losses to the enterprises as well as to the countries.

In Chapter 4 it has been pointed out that the information services and products of the trade information service units of organization and institutions that promote export and imports are not adequate. In Chapter 5 information need analysis of the different export and import enterprises, researchers and policy makers was carried out. The types of information services and functions required from the trade information systems and centres by these groups of users has been revealed.

The discussion in the preceding chapter indicates that need arises to develop an information support system for export and import information users. The development of an Export-Import Information System for Ethiopia (EIISE) would improve the foreign trade structure of the country through a sustained supply of trade information which would meet the information requirements of potential export-import information users, such as, exporters, importers, researchers, policy makers, and the public as a whole.

This chapter, therefore, attempts to address the different considerations that are required to design and implement such an information system. The design basically takes into account the information needs of the potential users of export-import information. The study deals with particulars when possible, and with general situations in developing an Export and Import System in Ethiopia (EISSE).

## **6.1 PROBLEMS OF THE EXISTING TRADE INFORMATION SYSTEMS AND SERVICES**

The problems of the existing trade information service units could mainly be regarded as the absence of a well-organized trade information service units in general and export and import information systems in particular. Therefore, in order to design an information support system which could reply to the queries of potential trade information users mainly exporters, importers, agents, researchers, entrepreneurs, government officials, and other potential user groups, the important problems of the existing systems need to be mentioned.

The problem areas of the existing trade information systems are as follows:

- (1) Absence of a proper system of processing trade information in many of the organizations and institutions information service units which promote export and import.
- (2) There are no adequate collection in each of the information service units which can attract users.
- (3) The existing trade information services and products cover only a very limited geographical area.
- (4) The types of information incorporated in the trade information service units are very limited. For instance, the profiles of trade partners in not well covered.
- (5) Information seeking activity is a very tiresome job. The seeker is required to look for information by visiting all the concerned organizations.
- (6) There is lack of awareness about the importance of trade information by officials at different levels.
- (7) Failure to keep track of the profiles of export and import items.
- (8) Most of the organizations and institutions which are engaged in rendering trade information services or in promoting foreign trade directly do suffer financial constraints.
- (9) The units are not adequately staffed with technical and information professionals.
- (10) The information systems and services offer their services in dispersed forms. The IOE, AACC, ETC, and the MOT all encourage investment, export, and import; and do provide similar information services. They lack cooperation among them selves. Due to this reason there is duplication of efforts which brings about wastage of the limited available resources.

- (11) Despite the fact that, there are information services units, proper assessment of requirements and needs of exporters and importers have not been carried out. Further more, continuous evaluation of the systems have not been undertaken.
- (12) Lack of User Education and Sensitization of users on the importance of export and import information; publicity on the availability and the existence of trade information services and products, and the benefits that could be obtained from such an information system and documentation centres.
- (13) Lack of proper mechanism for updating available statistical information. which minimizes the value of information. Because, export-import information is mostly short lived, and market based.

In addition, the prevailing market conditions amplify the existing problem. In order to attain the growth expectations and to ensure the further expansion of export and import in Ethiopia, the factors that hinder the development of the sub- sector should be reduced. However, most of the problems are traced back to the inadequate supply of information.

The user study reveals that there is a distinct need for an information system for export and import for Ethiopia. The system is expected and required to overcome the problems that hindered the development of export and import. The benefits and the improvements expected from the output of such a system exceeds both development and operating costs.

## 6.2 OBJECTIVES OF EIISE

### 6.2.1 General Objective of EIISE

The main objective of the Export and Import Information System for Ethiopia (EISSE) would be:

“To provide ready access of export and import information to exporters, importers, policy makers, researchers, agents, planners and others who are engaged in export and import trade; so that, the trade sector can contribute to the economic and social development of Ethiopia.”

### 6.2.2 Specific objectives of EIISE

Some of the specific objectives of the EIISE

- (1) To identify, collect, and process foreign trade information resources; and disseminate to potential export and import information users as well as the public at large;
- (2) To provide information support services to organizations, institutions, business enterprises and individuals working on economic and social problems of Ethiopia;
- (3) To facilitate access to the collections and data bases on all matters related to export and import, such as, standards, technical regulation, financial regulations, packaging, patents and other many related subjects and areas needed by users of export and import information.

- (4) To support information activities of sub sectoral information systems and services as much as possible in facilitating their contribution as trade information sources in the system;
- (5) To establish links (systems interconnection) with international trade information networks, databases and trade information and documentation units outside the nation.
- (6) To organize the necessary training and sensitization programmes for EIISE potential users;
- (7) To establish and ensure the system's compatibility with existing national, sectoral, and international trade information systems and services so as to facilitate data and information transfer and exchange between them.
- (8) To ensure the complementation of uniform working procedures.
- (9) To avoid duplication of efforts in rendering services as well as processing of information for export and import.
- (10) To assist in establishing and strengthening of national documentation and information centres on trade and commerce.
- (11) To make use of uniform technical regulations, promotional activities, and advisory services.

### 6.3 EIISE SUBJECT SCOPE AND REQUIREMENTS

The proposed computerised export and import information handling system for Ethiopia is expected to provide a better control, operation and information services and products. As indicated in its overall objective, EIISE would try to satisfy the export and import information needs of Ethiopian export and import information users at the individual,

- (4) To support information activities of sub sectoral information systems and services as much as possible in facilitating their contribution as trade information sources in the system;
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institutional, national, and international levels. This should be done by providing accurate, timely, reliable and up-to-date export and import information. The export and import information would assist its potential users for different purposes, such as, research, policy formulation, planning, and evaluation, so that, it can result in raising foreign revenue and profit.

### 6.3.1 Subject Scope of EIISE

It is difficult to determine the scope of a subject in which different user groups ( wide range) are concerned. But, the following brief listing is required to be included by EIISE:

#### i. Statistical Data

- Balance of trade with all trading partners.
- Import statistics on different commodities in Ethiopia.
- Export statistics on different commodities in Ethiopia.
- Current world market prices of commodities traded in the international market
- Potential of Import Amount required
- Potential of Export Amount produced
- Revenue obtained
- Production and export growth rate.

#### ii. Market survey data

- Unit price of commodities and their trends
  - . Exchange rates
  - . International banking laws
  - . International telephone directories.

- Distribution channels and mechanisms
  - Import regulation of commodities
  - Quality and standard of commodities
  - Tax and Duty Regulations
  - Schedule of local and international trade fairs
  - Information on tariffs
  - Overseas trade (export and import) regulations.
- iii. Foreign trade techniques
- Marketing and management techniques
  - Packaging techniques
  - Design Techniques
  - Market researches
- iv. Additional Areas
- List of ports
  - List of shipping lines
  - Legal, terms, definitions and meanings in relation to export and import;
  - Local and foreign chamber of trade and industry addresses and objectives

### 6.3.2 EIISE Requirements

EIISE is required to perform the following:

1. It should record and register all queries of users of the system for building profiles and improvement of the system. It should also establish a register of would be trade fairs and other export and import promotion programmes.
2. It should develop mechanisms, technical and technological capability to scan and distribute very useful and relevant materials, as well as incorporate it into the database.
3. It should develop a unit for User Education  
The users education unit will design a continuous and periodical packages to educate and sensitize exporters and importers as well as would be exporters and importers on how to utilize and exploit the available information services.
4. It should develop ways and mechanisms for periodical highlight of different commercial news and trends.
5. It should carry out current awareness services; Selective dissemination of information;and retrospective bibliographic searches. It has to develop the awareness of its prospective and potential users on the latest developments in the international trade environment.
6. It should develop inquiry reply services. The service should be set or designed and has to be done with great effort to communicate relevant, up-to date, timely and qualitative export and import information at least to its active users. It should also take into account the understanding and absorption capacity of each user.
7. It should keep track and ensure access to both published and unpublished documents which are of major interest to exporters.

8. It should render and carry out information services and products on time, for only timeliness adds value to information in general and export and import information in particular.
9. It should utilize as much as possible, the most recent information technology and data transmission and telecommunication technologies to facilitate and improve its information services and products.
10. It should carry out classification of data/information, consolidation, and repackaging of export and import information;
11. It should carry out Reprography services.
12. It should allow access to bibliographic and factual data bases of foreign trade information systems and services; and updated profiles of exporters and importers;

#### 6.4 DESIGN BLOCKS

##### 6.4.1 Organizational Structure of EIISE

Although, it is possible to have a comprehensive list of organizations and institutions which could benefit as well as improve the information base of EIISE here is a list of some of the would be active nodes for EIISE.

1. Ethiopian Ministry of trade;
2. Ethiopian Chamber of Commerce;
3. Ethiopian Customs Authority;
4. Ethiopian Freight Transport Corporation;
5. Ethiopian Air Lines;
6. Ministry of Industry;

7. Ethiopian Shipping Lines;
8. Ethiopian Maritime and Transit Corporation;
9. National Bank of Ethiopia;
10. Commercial Bank of Ethiopia; and
11. Addis Ababa Chamber of Commerce.

A detailed organizational structure of the focal EIISE is suggested in Fig.2.

The basic principle of information system design states that design alternatives of a system should be tailored towards the organization's objectives. In relation to the above statement and the objectives of EIISE mentioned in section 6.2.1 and 6.2.2. The design alternatives that were considered was the structuring of each participating nodes together with the data processing resources. The basic structural alternatives were:

- (1) A decentralised data processing system;
- (2) A centralised data processing system; and
- (3) A distributed data processing system.

The design alternatives have been analyzed by comparing the benefits and the disadvantages of each option.

**A Distributed data processing system** is an interactive system of computers that are geographically dispersed and connected by telecommunications, with each computer able to process data independently and forward it to other computers with in the system.

**A Centralized processing (Network)** is a type of network that follow a centralized structure where the major portion of the resources and the processing activities are concentrated at one participant of the network as a focal point for the other members

(nodes) to contribute to and access from it. The focal point usually assumes the coordination responsibility as well. Communication of individual members is through the focal point. In a computerised system participants in such a type of network share a central computer facility.

**A Decentralized information processing system** means having data/information processing to be carried out in several different locations, away from the centre.

The advantages and disadvantages of these three alternatives is given in Table 23. The selection criterion, in addition to the advantages and disadvantages of each processing structure is made by obtaining answers to the following sets of points. Is there an advantage in having a common central database with separate local processing facilities, regardless of the structure of processing at the possible nodes being either manual or computerized? Which system is cheaper, taking into account the manual or computerised processing at the nodes as well as the benefit that could be derived out of the system? Is there a security risk in transmitting data over communication links in the case of a computer to computer connection? How often must the files be updated, either manually or electronically both at the centre if any and at the nodes? Is there a natural way of dividing the data into groups, so that each computer has its own grouping of records? Will local computer user personnel require access to common data, in which case a central database would avoid duplication of records?

The need for a central database at the focal point in a national sub-sectoral system is very necessary. Due to the autonomous nature of all participating organizations it could not be possible to have every thing centrally. The idea of EIISE being sharing of resources by

coming into an agreement, it could be possible to place referral databases at the central node. In addition, some of the databases could be processed centrally. Factual and other specialized databases could be processed by other respective nodes.

TABLE 23

ADVANTAGES AND DISADVANTAGES OF CENTRALIZED, DECENTRALIZED AND DISTRIBUTED DATA PROCESSING SYSTEMS.

ADVANTAGES	DISADVANTAGES
<p><b>CENTRALISED PROCESSING SYSTEM</b></p> <ol style="list-style-type: none"> <li>1. One set of files. Every one uses the same data and information.</li> <li>2. Better security/control over data and files.</li> <li>3. Central system in a better position to know what is going on.</li> <li>4. The system might be able to afford a central computer which is very large, with extensive processing capabilities that smaller computers could not carry out.</li> </ol> <p style="text-align: right;">It will continue on</p>	<ol style="list-style-type: none"> <li>1. Local offices might have to wait for data to be processed centrally, especially if processing is done by batches.</li> <li>2. Reliance on head office. Local offices have rely on the central processing unit to provide the information they need.</li> <li>3. if the central computer breaks down, or the software develops a fault the entire system goes out of operation.</li> </ol> <p style="text-align: right;">the next page !!!</p>

<p style="text-align: center;"><b>DECENTRALISED PROCESSING SYSTEM</b></p> <ol style="list-style-type: none"> <li>1. Each division may introduce an information system specially designed for its individual needs.</li> <li>2. If data originates locally it might make sense to process it locally too.</li> <li>3. Each division has control over its own files and data.</li> <li>4. Like to be easy/ quick access to information when it is needed.</li> <li>5. Any breakdowns in the system are restricted to just one part of the system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Many different un coordinated information systems will be introduced.</li> <li>2. Decentralization encourages lack of coordination between departments.</li> <li>3. One office might be unable to obtain information from the information system of another office.</li> <li>4. There might be a duplication of data with different offices holding the same data on their own separate files.</li> </ol>
<p style="text-align: center;"><b>DISTRIBUTED PROCESSING SYSTEM</b></p> <ol style="list-style-type: none"> <li>1. Speed of processing for both local branches and also the central</li> <li>2. There is a possibility of distributed data base. Data is held in a number of locations, but any use can access all of it for global view.</li> <li>3. General flexibility in system design. The system can cater for both specific needs of each local user of an individual computer and also for the needs of the information system users as a whole. By providing communication between different local computers in the system.</li> <li>4. Data transmission is restricted because each computer maintains its own data files which provide most of the data it will need. This reduces the costs and security risks in data transmission.</li> <li>5. The effect of breakdowns minimized, because a fault in one computer will not affect other computers in the system.</li> </ol>	<ol style="list-style-type: none"> <li>1. There may be duplication of the data on the files of different computers. If this is the case, there maybe some unnecessary storage costs incurred.</li> <li>2. Difficult to administer and to maintain with service engineers.</li> <li>3. The items of equipment used in the system must, of course be compatible with each other.</li> </ol>

Some of the files need instant up-date, while others do not need a frequent updating. There is also a natural way of dividing export and import data as statistical, market, bibliographic, and others. A personnel in one or many groups may require the same data.

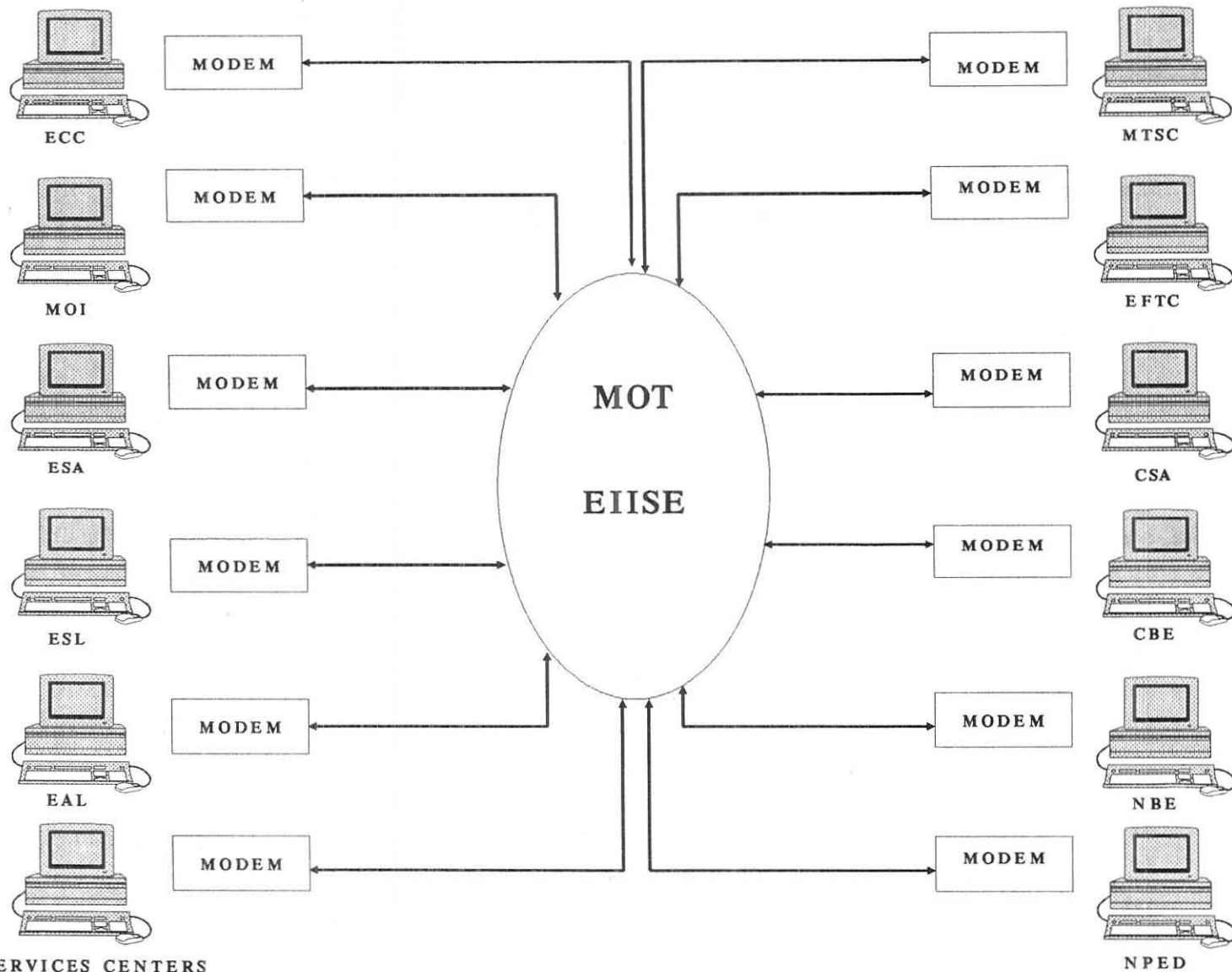
In general, the majority of the responses require a distributed data processing system. In a centralized processing system local users may have to be in a queue for their data to be processed and get a reliable information. Thus, it will result in the dissatisfaction of the users, which actually is not the objective of EIISE. On the other hand a decentralised system encourages lack of co-ordination between departments as well as duplication of data and efforts. With the meagre resource available this can not be the most feasible solution. On the other hand distributed data processing allows the following benefits: increased manageability of the computer system, decreased communication costs in some circumstances, and greater adaptability to the organizational structure. Distributed data processing system has been chosen due to the following sets of additional benefits:

1. Processing speed will be increased; for, processing can be carried out both centrally or at dispersed location.
2. The ability of the computers, within the system, to process data 'jointly' or 'interactively' will enhance the system capability.
3. It reduces the work load of different personnel working on different areas of export and import information.
4. It, with its file server, serves the rest of the computers offering generally accessible hard disk files for all the other work stations in the system.

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SERVICES CENTERS  
 FIGURE 2 PROPOSED EIISE NETWORK

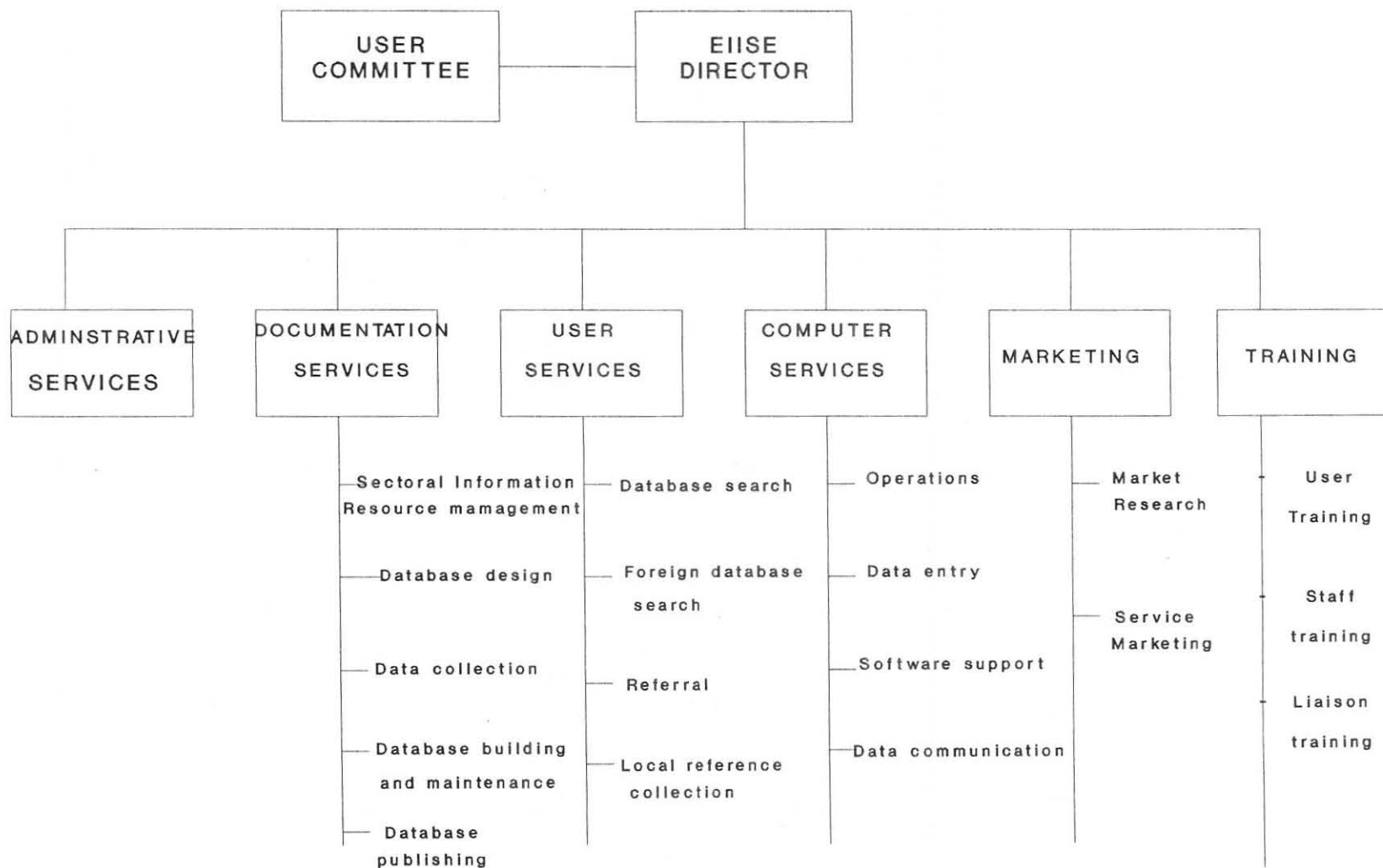


FIGURE 1: ORGANIZATION STRUCTURE FOR EIISE

#### 6.4.2 Selection of Host Organization

Many items of trade information, which are of high value to export and import information users, are generated in some of the organizations and institutions mentioned in Chapters 3 and 4. These organizations and institutions directly or indirectly promote the development of export and import trade in Ethiopia. We have also seen that there is duplication of efforts in the information generation, processing and dissemination activities. Thus, need arises to select a host institution that co-ordinates the smooth flow of information and data exchange among them and reduce duplication of efforts. The focal point will also serve as an information pool for the remaining institutions by institutionalizing the use of identical standards and manuals to facilitate the desired information exchange among these institutions. In this pool many types of information services could be available to each institute as well as an outsider at least in the form of referral services by the focal point.

In addition, the host for the proposed Export and Import Information System of Ethiopia (EIISE) should be structured so as to render the utmost possible information services with less utilization of the meagre resources. The study revealed that the Ministry of Trade (MOT) is the most likely choice to host EIISE. The selection of MOT as a focal point to the proposed EIISE is because of the following reasons:

1. It is entrusted by law to collect, process, compile, and disseminate trade information and issue licences, as well as to render trade information services;
2. It has both domestic and international contact than the other trade information service units in the country. As a result, it could acquire other information resources quite easily than the other information service units; and

3 It has the better technical facility than any other likely trade promoting institutions.

The Ministry of Trade Data processing environment is equipped with:

- (1) one 486 8MB RAM AND 210MB hard disk drive
- (2) Nine 386 4MB RAM and 85MB and 40MB hard disk drives
- (3) One 286 1MB RAM AND 20MB hard disk drives
- (4) A laser printer and dot matrix printers
- (5) Uninterruptable power supply (UTP) facilities
- (6) Word processing, Spreadshit, graphics, DbaseIII, DbaseIV, CDS/ISIS and project management software. It has also some in house developed software packages.
- (7) TINET CD-ROM Data bases
- (8) LAN

#### **6.4.3 Resource Sharing**

However, the Ministry's Data processing environment has also a number of problems. Some of the problems that are encountered by the MOT trade information service unit related to the trade information services are related to:

- Human resource;
- Financial resource; and
- Information resource.

The existence of the technology in the absence of manpower which could properly utilize it, and taking into account the obsolescence rate of information technology machines and the intensity of the problem, calls for a resource sharing among the other organizations set for the same purpose. As per the study and judgment of the researcher the Ethiopian Chamber of Commerce has the best resourceful persons in the trade information field than any other possible candidate institute. However, ECC though is entrusted by law to carry out trade information services it neither has the mandate nor the structural advantage as the Ministry to get information from or coordinate the other governmental institutions. This makes it difficult to host the EIISE in the ECC. This development indicate that EIISE should have the following basic features and characteristics.

A resource sharing of the human and technical resources should be the principle of EIISE and the scheme needs to be established. It is expected that with the resource sharing of the various mission oriented trade information systems and services and products, EIISE would develop the capacity of rendering adequate and satisfactory information services. EIISE would establish effective linkages with information networks and data bases situated in the different MOT branches out side the capital. This would enable EIISE to serve a considerable number of the country's agricultural producers and exporters. It would establish effective linkages with sub-regional and international trade information networks and databases. EIISE should handle all export and import related, numerical, statistical and non-numerical (bibliographic and actual) pieces of information.

#### **6.4.4 Input Design Considerations**

Input design is closely related to data collection and data capture (ACCA 1992). The input design should be made balancing and correlating the requirements of the system with the personal capabilities of the EIISE users. The data elements that should be 'static', that is, data elements which should not be re-input every time processing is done to reduce processing time, must be identified based on a detailed analysis of the variables that are to be incorporated in the system. The transaction records should not contain the static data elements. A separate master file data for the static data elements should be maintained.

##### **6.4.4.1 Data Collection**

The inputs of EIISE should be collected from different sources. The possible sources of data inputs would be as follows:

- The bibliographic data inputs into the bibliographic database should be obtained from the different bibliographic sources mentioned in section 5.6 as sources of export and import information.
- The prices of the different commodities both locally and in the international market are to be obtained from the Central Statistical Authority and the Customs Authority respectively.
- Foreign exchange statistics can be collected from the National Bank of Ethiopia.
- Institutional data should be collected through a periodic survey of institutions and from National Planning and Economic Development of Ethiopia.
- Local Experts for the Expert database are to be collected through a periodic conduct of conferences on trade information services and recording its participants,

Professional associations, consultancy services, and also through down loading from international trade information systems to get data for an International Experts.

- The data elements for the enterprise database could be collected either through enterprises membership in any of the city chambers or licence issuing section of the Ministry of Trade.
- Periodic reports of commercial attaches and agents are also major sources in market survey and data.
- Other very relevant data items should be collected from institutions that are engaged in the different activities. A well-designed institutional arrangements and co-operation framework with these institutions need to be made to have access to the data elements that are most needed by exporters and importers. For instance, air freight charge from EAL, list of ports from Ethiopian Shipping Lines, items exempted from duties from Ethiopian Customs Authority, etc.
- Additional data could also be obtained being a membership in the different Sub-Regional, Regional, and International Trade Information Networks.

#### **6.4.4.1.1 *Data capture modes or input modes***

The EIISE is proposed with the basic assumption that the pieces of information are to be collected and provided by the City Chambers of Commerce's officers or by Ministry of Trade representatives in each region of Ethiopia and other participating institutions. The data capture mode can be carried out through paper forms and/or magnetic media. The data in paper form can be keyed into the databases by the EIISE staff and a mechanism to import data on a magnetic media should be designed.

#### **6.4.5 Process Design Considerations**

The data collected through the different data capturing modes should be processed to produce the different output requirements stated in the output design section. The processing of the data depends on the data capture mode. If the input data is acquired in a magnetic form it will be down loaded and then processed into a form as much as possible to the user requirements. The process design should consider the output requirements of the proposed system.

#### **6.4.6 Output Design Considerations**

The outputs and the output forms are the ones which dictate the type of input and the different fields and databases of any system. This also holds true in the case of EIISE. The output mediums and forms of EIISE could be either hard copies, VDU display or magnetic ones. The content and formats of sample outputs of the prototype databases in their hard copy forms are given in Appendix 2. In the prototype database, different display formats have been written, in line with the data elements that needs to be outputted (reported). It should be noted here that the display formats have been designed based on an interview the researcher had had with some enterprises, and the facilities that can be provided by the CDS\ISIS capability. In EIISE printed outputs should be obtained after a user conducts a search. The users can get a hard copy and/ or a magnetic copy of their search output. The frequency and the various forms of output can be specified after a detailed study in the implementation stage of the system.

#### 6.4.7 Databases

The user study carried out in Chapter five revealed that the areas of information required by export-import information users is very diverse. The size of the enterprises, the transnational nature of activities that they are engaged in, the number of items they produce, the information access behaviour of their competitors-all add to the complex nature of the activities of export and import enterprises. This has resulted in a very complex area of information requirement by export and import information users. However, in order to provide most of the information services and products, required by export-import information users of an information system in support of export and import, need arises for development of appropriate databases. Nevertheless, due to the complex nature of the variables in the information requirements by users and other considerations, there is a need to call for a detailed analysis in the data elements that should be incorporated in the databases. In general, the types of databases to be constructed include:

- (1) Databases of enterprises, organizations and institutions;
- (2) Databases of Experts/consultants on the area;
- (3) Databases of information systems/centres;
- (4) Databases of projects related to trade in general and export and import in particular;
- (5) Bibliographic database;
- (6) Databases of export and import items; and
- (7) Other statistical and factual databases.

As a result prototype databases for some of the databases that need to be developed by the proposed system have been developed using Micro CDS/ISIS version 3.02. Micro CDS/ISIS is used because, it is the only text retrieval system available at SISA. The prototype databases are discussed in section 6.8.

#### **6.4.8 System Control**

Attention must be devoted to controls over data input, data processing, report and other kinds of output. These controls need to be made during detailed design (Scott 1986). The control over the computer system will become an organization's over all internal scheme. Input data can be lost or it might contain errors. Controls need to be applied to reduce the likelihood of errors and the loss of data when human error has been done. The extensiveness of the input controls will depend on the method of processing input data. For instance, a keyboard input and OCR input do not have equally likely errors. Another cause for inaccurate information is an error in processing.

##### **6.4.8.1 Input Control Considerations**

The consequence of input errors could be costly. A wrong input resulting in a faulty output information would result in bankruptcy in the export-import field. EIISE should include more extensive input controls on some selected data elements or databases because the cost of making input errors could be significant.

Errors in data capture are difficult to spot once they have been made, because, they are often errors on the source document. The EIISE should reduce such errors, through double checking. The EIISE has to use an internal check on data capture errors. For instance, the wrong export size or amount can be checked by computing the total export amount, in that week by an another data entry personnel. Input control at the transcription and data conversion can be made by the use of well-trained personnel, and proper supervision, well designed format, and data verification or double keying of the input. During the time in which the inputs are made in bitters, the system should be designed to produce a list of the input data which can be checked for accuracy.

#### 6.4.8.2 Output Control Considerations

There should be controls over output from computer processing of EIISE. All input records that have been rejected by the data validation checks, and master file update checks should be looked at to find out the cause of the error. Then, corrected data of them should be prepared for re-input. Output to magnetic files should be properly labelled and sent to a store.

#### 6.4.8.3 Process Control

Process controls should be applied on EIISE system to check the correctness of the data files that are being used for processing, and to check whether the data on these files are not lost or corrupted. Different types of process control mechanisms could be adopted as per a detailed design that best suit the established system.

#### **6.4.8.4 Database Controls**

The EIISE database would be accessed by large number of users, thus the possibility of alteration, unauthorized disclosure and fraud need to be controlled. Such a database control should be made by constructing complicated password systems, or restricting certain database contents to certain user groups.

### **6.5 EIISE SERVICES**

#### **6.5.1 Services of EIISE Focal Point**

The EIISE focal point is expected to provide the following services.

1. Organizing and supporting training programs. The training program can be tailored towards upgrading the skills of the information workers.
2. Referral Services. EISSE focal point is not expected to handle all types of information, but, it is expected to give a referral services. For instance, referring to the right expert or to the right information centre (node).
3. User sensitization. It is expected to sensitize authorities in order to get the necessary support. In this regard, EIISE focal point can play a major role in organizing sensitization programs. Furthermore, potential partners to the system can be sensitized by similar programs
4. Introduction of standards. If new standards of processing are introduced all over the world, the focal point can make available to the system
5. Newsletters about the system and/or information products are expected to be published by the focal point.

### 6.5.2 Services of Participating Centres

The EIISE participating nodes could render the following services:

- Database construction;
- Reference services;
- current awareness services;
- Selective dissemination services;
- Electronic documentary services;
- Advisory and consultancy services;
- Market services;
- Reprography services;
- Access to bibliographic and factual databases of foreign trade information systems and services;
- Retrospective bibliographic searches ;
- Carry out user education;
- Referral services;
- Consolidation and repackaging of export and import information; and
- Document delivery.

## **6.6 RESOURCE REQUIREMENTS**

There are three basic resource requirements in developing the EIISE system, these are:

1. Hardware
2. Software
3. Human resource

### **6.6.1 Recommended Computer Hardware Equipments for EISSE**

The data processing department of the Ministry of Trade is proposed to be the focal point for the implementation of the general export and import information system. The computer hardware should be organized on a distributed environment. If resource allows, information professional and experts should be provided with the necessary microcomputers and user friendly tools. The tools should enable the information workers of EIISE to have direct access and manipulation power of the EIISE databases. The other nodes connected through a metropolitan network in different places with microcomputers should be linked to the host EIISE central service placed in the Ministry of Trade.

It should be noted here that, the Ethiopian government has distributed a general regulation to all government institutions, on acquisition of hardware, software, facsimile, and printing instruments through purchase, loan or assistance. A purchase or any other way of acquisition of these equipment is permissible only if the National Computer Centre of the Ethiopian Science and Technology Commission approves the potential in the use of these equipments as well as whether they are in line with the specifications set by the institutions order. The Centre, which is accountable to the Prime Minister's office approves and checks

acquisitions, about their compatibility, manufactured date, working environment, and other factors. The Government also specifies the type of system configuration in relation to the type of activity that is to be pursued by the corresponding institutions. It has also specified the type of computers and software that can be acquired based on the purposes to which they are intended. Therefore, here under is only a list of hardware machines that needs to be acquired for a better export and import information services. The suggested hardware for the EIISE in a Metropolitan Network environment which can satisfy the current and the very immediate future processing requirements should be as follows:

1. A database server with high storage capacity and processing speed, which is compatible to the existing LAN environment, should be acquired. This is because due to the fact that the existing system within MOT suffers by low processing speed.
2. Work Stations and other microcomputers for database maintenance, administration or system development can be acquired as per the need and developmental stages of the EIISE phases.
3. Desktop Publishing: An independent work station with specialized feature required for undertaking EIISE publishing work should be acquired. This can help in producing newsletters, information products and other publications
4. Scanner : Scanners can be introduced as an input devices. Since the types of inputs are in direct forms, as discussed above in this chapter, the scanner might help in entering data into the system.
5. Modem : for E-mail and other facilities
6. CD-ROM : To resume the current TINET data exchange scheme as well as other international data exchange schemes.

7. Back up tapes : To store recorded data and transactions as well as a back up for immediate functions.
8. Reprography machines: for hard copy supply to users.

In acquisition of hardware, the compatibility, flexibility, standardization, portability, availability of suppliers, servicing, easiness of installation; the technical, economic and operational feasibility usability to the expected volume of input and output, and its increasing rate should get due consideration.

### **6.6.2 Recommended Computer Software**

It has been established that, in chapter 5, the primary users of EIISE are exporters, importers, government officials, planners, researchers, external consultants, and high level non-government officials. Development of a modern cost effective data/information dissemination tools being introduced at the various user levels require the database management systems to have highly flexible features.

In selecting the system software and development tools the following basic features are considered.

1. Data import and Export facility

The system to be developed should provide a fully integrated data capturing, processing, and dissemination facility and should have facility for data import and export from/to 4th generation language application programmes, spreadsheet and XBASE family software

packages. Thus the software, should include modules for transferring or receiving export and import data to/from external application packages. The system should be able to offer high level flexibility in accessing the EIISE data for use with other applications or visual view and ease of operation.

## 2. Ease of Use

The system should be user friendly and should be designed in such a way that, maximum ease of use, through use of action which are menu based is attained. It should also incorporate screen presentation facility including the selection of the data items for input or display for specific transaction, the painting of the screen for selected information and colour selection. For experienced users, speedy combination should be available to bypass the process of menu selection, thus access to data is quick and easy.

## 3. Multi Level Security

The system should provide security so that users as well as unauthorized operations are restricted to make changes to the database. Specific function, can be assigned to authorized personnel to undertake, the updating and dissemination of operations. Similarly users can be limited to specific databases. The system should be stable and have the ability to recover, from technical malfunctioning without loss or damage of the data with minimum operator intervention.

#### 4. Flexibility

The system should enable extensive use of parameterisation. So as to tailor output to ones requirement. These parameters should allow users to define transaction types, screen formatting, input layout and report headings.

#### 5. Other tools

The system should provide a complete list of data dictionary, file types, file layouts, data formats, etc.

#### 6. Specific Database Management consideration

The database management system, in addition to the aforementioned requirements, should be a relational database management system. It should be designed for distributed online transaction processing system, and also operate in heterogeneous networks. That is, the nodes attached to EIISE could have their own way of networking styles different from that of EIISE. It has to have an adaptable graphic user interface. It should allow application and data of any type to be linked and used together. A 4th generation language should be available to write programs in case modifications are required.

### 6.6.3 Human Resources

The functions that require permanent technical and skilled manpower in the host and other nodes are the following

- Data entry
- Data Collection
- Data Editing and Updating
- Data distribution and dissemination
- System Maintenance and Security
- Database Design and Administration
- Market Research and Service Marketing

### 6.7 POTENTIAL BENEFITS TO BE DERIVED FROM THE PROPOSED SYSTEM

- (1) Improved efficiency in terms of time, human resource usage and costs, in all stages of data processing and transmission from the trade information sources to the exporters and importers.
- (2) Improved quality of trade information services, For instance in terms of accuracy, level of detail, timeliness etc.
- (3) Greater flexibility and responsiveness to particular exporter's or importer's need. That is, the trade information systems can provide information as to the specific exporter or importer needs.
- (4) Increased access for exporters and importers to all trade information sources within and external to the trade information system.

- (5) Increased efficiency through the sharing of common databases either within the trade information system or by using external database sources. E.g (TINET)
- (6) An enhanced degree of user interaction to specify trade information requirements, and needs and to review, modify and update these needs as the problem/situation develops or changes.
- (7) Improved efficiency of communications both between members of the trade information, and with outside systems and trade agencies.
- (8) The ease with which trade data may be captured and stored may result in a less selective approach to identifying the information need of exporters and importers. Possible consequences of this high redundancy of information within the trade information service systems, which is likely that users will be provided with large volumes of superfluous data, is making the trade information system less effective.
- (9) The apparently limitless capacity of information technology in terms of storage and processing may result in less cost sensitive approaches to designing and using the trade information system.
- (10) Improved access to databases and information sources. It will be a one-window shopping for users.
- (11) Better management of the total system of trade information.
- (12) Reduced costs of processing, storing, retrieving and communicating data. A consequence of developments in it has been the significant reduction of the cost of processing a unit of data.
- (13) In addition, the increasing complexity of foreign trade environment, the increased scale and complexity of import and export enterprises is creating a demand for more information. This has resulted from the increased scale of many enterprises, their diversification to a number of different market/product sectors, the increasing

specialization of activities within the enterprises functions, and the development of alternative organizational structures to facilitate effective management and control of enterprises- with many business and commercial organizations operating in a multinational basis extending the problem of management, control and communication across border. This information requirement could be met by such a system.

- (14) The greater demand made on trade information systems to provide more information on its operation to outside agencies and regulatory bodies, like COMESA could be attained.
- (15) The improved knowledge, education, training of decision makers export and import practitioners/promoters and other users of information have resulted in the demand for a more comprehensive and detailed information to assist them in their foreign trade activities. Getting these group of users satisfied by the system is an asset by itself. They will contribute for further development of the information systems.

## 6.8 PROTOTYPE DATABASES

It has been discussed that most of the information services that are to be rendered by EIISE require the development of one or more type of databases. To demonstrate some of the benefits and the services that can be derived from the proposed system some prototype databases have been developed. These databases are developed based on the ABNCD+ data structure at SISA. The ABNCD data structure is shown in appendix 8 (Abebe et al 1992). These prototype databases can be adopted into the EIISE system or can be expanded by EIISE and other trade information service units which cater for the development of export and import in Ethiopia.

## **1. GSGS database**

GSGS is a database named after the two initials of the researcher who adopted the database from the ABNCD data structure. The GSGS is an integrated database which consists of the following profiles and other factual databases.

- (1) profile of business enterprises, organizations, and institutions Profile of export and import enterprises;
- (2) Profile of experts, consultants and agents;
- (3) Profile of information system and services;
- (4) Profile of different projects related to export and import.;
- (5) Bibliographic database including documents of all sort. Documents of all sorts

The outputs of each of these databases is shown in Appendix 2.

## **2. COMDB database**

COMDB is a database on export and import commodities. It shows a summary of the amount exported to or imported , the value, the destination, and other the items of information which are of high interest by userst.A sample output of the database is shown in Appendix 2.

### **6.8.1 Prototype Interface.**

Micro CDS/ISIS is a computer-based system for information storage, processing and retrieval. It is a generalised system which is designed for the computerised management of structured non-numerical databases with records of variable lengths. It is a software package distributed by UNESCO.

The package, (CDS/ISIS) V3.02, is one of the utilities that is available at SISA. Hence, it was used by the researcher to develop the different prototype databases of the proposed Export Import information System in Ethiopia (EIISE). However, it was necessary to develop a user interface to meet the end user requirements of users of EIISE. An attempt was made to improve its user friendliness using ISIS/ PASCAL programming language.

The search language, screen lay outs, on screen instructions and printed manuals of micro CDS/ISIS with which the user has to interact with the system in order to retrieve information is not suitable from the end users point of view (Perera 1992). According to pereras's (1992) evaluation of the package search termination facility of CDS/ISIS is not adequate. A novice user has to back track all the menus to come out of the system. Although, there are hot keys with which users could use to jump over menus, they are not known to all end users (Neelamagan 1993). Interaction with the system requires a pre-hand investigation and knowledge from the user about:

- (a) Available database names
- (b) Knowledge of search or query formulation, say boolean logic or truncation, etc; and
- (c) How to use the dictionary to select terms for a search.

CDS/ISIS on screen instructions to users, which direct the user towards the goal he/she expects to reach, are neither friendly nor adequately informative even to an intermediate level users. Its error messages are not adequate in informing users, when errors are made. Help messages, are also essential features of an information retrieval package. However, CDS/ISIS help system is not providing context sensitive help messages. Furthermore, CDS/ISIS does not contain help message in all the stages of information searching

retrieval, and printing. A program has been written by the researcher of this study to make the system user friendly. A menu based user friendly interface has been developed using ISIS Pascal.

## 6.9 IMPLEMENTATION

The proposed EIISE has to allow an exchange of information among different organizations and institutions which are of very diverse organizational objectives working in the export and import environment with a different degree of involvement. Thus, to carry out such an amalgamation of efforts and in setting EIISE a steering committee, which directs the establishment of this proposed system and its full implementation, has to be made from all the possible information nodes. Then they have to decide on the priority areas and other infrastructural consideration for the full implementation of EIISE.

In addition, the data collection task and its sources which meets the requirements of the system is very complex. This requires great attention from the concerned government and other officials. This also requires the formation of a steering committee of the above sort. Thus, an implementation strategy is suggested and forwarded to the steering committee for the utmost and urgent benefit that could be realised or obtained from the system.

The implementation of EIISE could be carried out in the following stages.

### **Phase I**

1. Detailed design of the system
2. Review of selected pilot export/import areas and develop the necessary linkage
3. Test the data collection methodology.

4. Creating the necessary link with specialized model organization and develop data supply mechanisms.
5. Test the system.
6. Dissemination of the EIISE output in various forms.
7. Collection of feed back mechanism.
8. Preparation for final implementation

## **Phase II**

9. Establish the EIISE
10. Extend the WAN with the other institution which can supply or/and use export import information.
11. Institutionalization of data collection at all levels and increase the number of nodes
12. Establish strong and reliable data and information exchange network with sub regional, regional, international and other institutions engaged in the same activity.

CONCLUSION AND RECOMMENDATIONS

7.1 CONCLUSION

The trade and development of a country are interlinked. The importance of foreign trade for the development of a country is founded on the fact that it forces the nation to allocate its resources efficiently. However, the contribution of foreign trade to the development of developing countries seems to be controversial. But, the fact is, if it is wisely performed, the international trade of a country significantly contributes in the development efforts of developing countries. Ethiopia cannot be an exception to this fact. One of the basic components that enables a country to perform its foreign trade efficiently and effectively is the accurate, pertinent, and precise information about it. Trade information in general, and export-import information in particular, is essential for the efficient and effective functioning of export and import enterprises. A sustained supply of export and import information (1) improves international trade operations of an enterprise through reduction of wastage in time; (2) enables the enterprise to provide better customer services; (3) helps it to analyze, and improve trading situations as well as the relationship between trading partners; (4) increases the ability of the enterprise to compete both locally and internationally; and (5) helps it to formulate its right foreign trade policy and to take right decision. In the context of the existence of a well-organized export and import information system which can render a reliable trade information services in time, the development of the foreign trade sub-sector is sure to materialize, which in turn, contribute to the development of the overall economy of a country. Despite the fact that many valuable items of information relating to its export and import are generated in Ethiopia, and a lot of other relevant items of information are also available from outside; there has not yet been any recognizable well-organized trade information service unit which is well-equipped to capture, process, repackage, retrieve, and disseminate the requisite items of information in the forms that are readily usable by its prospective users.

Of course, there are some organizations and institutions, which are somewhat equipped with technological facilities. Their objective is to render trade information services to help the promotion of export and import trade in Ethiopia. But the trade information services rendered by them, according to their users, do not meet their information needs satisfactorily. Besides, on many occasions, they do not get the information they seek from these service units. There are many factors responsible for this sort of poor performance of the existing trade information service units. Important among them are the following : (1) the inadequacy of the availability of pertinent sources of information; (2) the inadequacy of suitably qualified and trained information service professionals; (3) the absence of appropriate machines and equipment in most of the units; (4) the absence of internationally standardized practice of technical processing, storage, retrieval, and dissemination of information about the documentary sources of pertinent information; (5) the inability of existing personnel to generate appropriate information products and services; and (6) the absence of cooperation and coordination among the existing trade information service units. The ultimate consequences of the present state of affairs are (1) the poor performance of the existing service units; (2) The under utilization of the existing services of information available in these units; (3) the low level of appreciation about the role information in export-import activities; and (4) the low level of awareness about the existence of the information service units for trade information.

At this point of time, the search for a solution to the problems of an information service system in any sector, is to be sought by taking into account all the modern developments in the field of information products and services. The developmental changes in this field are mostly the contributions of the use of appropriate machines and equipment which are the products of advances in modern information technologies in information work and service. The benefits of using such machines and equipment are mostly derived by using the internationally standardized practices of information work and service. But for this purpose, what is essential above all is the employment of adequately qualified and trained information service professionals. Keeping in view all these requirements, this study has

proposed a computer-based information support system for export and import in Ethiopia. It is to function ultimately as a network. The system specifications have been furnished in detail in the previous chapter. But, for such a system to be operative, it would be necessary for several other essential developments to take place. The set of recommendations made in the following sections centre round those essential developments.

## 7.2 RECOMMENDATIONS

The System Structure and General System Specification of the information support system proposed on the basis of this study is a computer-based information support system for export and import in Ethiopia. It has been designed by taking into account the modern developments in the field of information services by using the appropriate machines and equipment which are all products of advances in modern information technologies. The use of these appropriate products of information technologies is no more restricted to the developed industrialized countries alone. Many of the developing countries of the world have succeed to take the advantage of using the appropriate products of advances in information technologies. Several of the African countries also are among them. So, if there is a national will, there should not be any unsurmountable obstacles to implement the system. But for the system to be fully operative it would be essential for several other developments to take place. Several of these developments can take place only of sincere initiatives taken by the Government of Ethiopia. Anyway, the following recommendations are made pertaining to all those essential developments.

1. The National Information Policy of Ethiopia, along with its directives, as it stands today, appears to be quite adequate to cover the "Ethiopian Trade Sector" under one of its already recognized sectors, namely, the "Ethiopian Industrial Sector." But, what appear to be not yet adequate are the appropriate measures for the implementation for the policy. The Government of Ethiopia has to take the necessary initiatives for the implementation of the policy covering all the sectors recognized by it as early as possible.
2. The most important aspect of the implementation of the national information policy of Ethiopia, is the development of the national information infrastructure to such an extent that the computer-based information support systems in all its recognized sectors could be operative in the long run in a wide area network mode. The

Government of Ethiopia has to take necessary steps in this regard as early as possible.

3. The Expert- Import Information System for Ethiopia (EIISE) has been proposed to be operative under the auspices of the Ministry of Trade (Ethiopia). But at this moments it is not adequately equipped with the essential infrastructural facilities, specially in regard to the essential hardware and software to make EIISE operative. It is necessary that the ministry of Trade (Ethiopia) takes the necessary steps to get itself equipped in this regard as early as possible.
4. Any computer-based information service system is made operative only by persons. Such persons have to be professionals adequately qualified and trained in the use of computers and other essential products of advances in information technologies for carrying out professional information work and service. One great problem for Ethiopia is the lack of availability of adequate number of such qualified and trained professionals at this moment. But, fortunately for Ethiopia, the necessary mechanism for developing such manpower has already been established. There is every probability of developing adequate number of such professional for this mechanism is already there. Even now there are quite a few already available. Making the computer-based information support systems in different recognized sectors of Ethiopia is a special task to be carried out in distinct phases. Therefore, it is not expected to be a very difficult task to find such capable professionals in Ethiopia itself at this moment. For the proposed computer-based system, the Ministry of Trade (Ethiopia) is to take all necessary steps to employ such persons as early as possible. The advantage of employing such professional form the very beginning of implementing the proposed system would be that these professionals would be able to take the full responsibility of implementing the system in the Ministry of trade. Besides, they would be able to take the responsibility of introducing a system of on-the-job training for the persons who are already there in the information service unit of the Ministry.

5. The proposed system is to function ultimately as a network system. A network system, for its smooth functioning, warrants a high degree of compatibility relating to the use of professional practices in all its nodes. The range of such compatibility comprehends the use of hardware, software, and all professional techniques and the tools associated with them. The whole thing is based on the principle of cooperation and coordination among the nodes of the network. To ensure this cooperation, coordination, and compatibility, as mentioned above, it is essential to form an official body which is to be entrusted with the responsibility of ensuring them among the nodes of the network. The specifications of the hardware and software for acquisition by different nodes are to be developed by this official body. In addition, the specifications of the professional techniques and tools to be used for the practice of professional information work and service in the nodes of the network are also to be developed by this official body. This body is to consist of at least one member from each node of the network. It may be chaired by the representative of the Ministry of Trade. The Ministry is to take the initiative necessary for the formation of this official "Coordinating Body" as early as possible. In this regard, the minimum system configuration for a Network environment recommended by the Ethiopian Government in 1987 E.C. is to be taken into consideration

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APPENDIX 1

QUESTIONNAIRE TO SURVEY INFORMATION NEEDS OF ENTERPRISES  
ENGAGED IN EXPORT AND IMPORT TRADE

1. Name of the Enterprise \_\_\_\_\_  
Position of the respondent \_\_\_\_\_  
Academic qualification \_\_\_\_\_  
Area of specialization \_\_\_\_\_

2. Are you engaged in export and import activities?

Y \_\_\_\_\_ N \_\_\_\_\_

3. What items do you export and/or import? Please make a tick.

- |                             |                          |
|-----------------------------|--------------------------|
| Coffee _____                | Textiles _____           |
| Hides and Skins _____       | Clothing _____           |
| Oil seeds _____             | Grain _____              |
| Meat products _____         | Tobacco _____            |
| Chat _____                  | Paper & Paper man. _____ |
| Pulses _____                | Electrical Eq. _____     |
| Fruits and Vegetables _____ |                          |
| Oil Cakes _____             |                          |
| Sugar and Molasses _____    |                          |

Others, please mention them \_\_\_\_\_

4. Do you need information on export and import?

Y \_\_\_\_\_ N \_\_\_\_\_

If yes, in which area/s ? Please tick accordingly.

- Available transport facilities, such as,

APPENDIX 1

QUESTIONNAIRE TO SURVEY INFORMATION NEEDS OF ENTERPRISES  
ENGAGED IN EXPORT AND IMPORT TRADE

1. Name of the Enterprise \_\_\_\_\_  
Position of the respondent \_\_\_\_\_  
Academic qualification \_\_\_\_\_  
Area of specialization \_\_\_\_\_

2. Are you engaged in export and import activities?

Y \_\_\_\_\_ N \_\_\_\_\_

3. What items do you export and/or import? Please make a tick.

- |                             |                          |
|-----------------------------|--------------------------|
| Coffee _____                | Textiles _____           |
| Hides and Skins _____       | Clothing _____           |
| Oil seeds _____             | Grain _____              |
| Meat products _____         | Tobacco _____            |
| Chat _____                  | Paper & Paper man. _____ |
| Pulses _____                | Electrical Eq. _____     |
| Fruits and Vegetables _____ |                          |
| Oil Cakes _____             |                          |
| Sugar and Molasses _____    |                          |

Others, please mention them \_\_\_\_\_

4. Do you need information on export and import?

Y \_\_\_\_\_ N \_\_\_\_\_

If yes, in which area/s? Please tick accordingly.

- Available transport facilities, such as,

- Taxes and duties levied on exports and imports;
- Export and Import regulations;
- Export Import trade directions;
- Channels of distribution;
- Agent selection and agreements;
- Packing and packaging regulations;
- Export financing and foreign trade;
- Maritime rules, regulations and Marine insurance;
- Trade statistics;
- Country profiles and consumer habits;
- Local and international trade agreements;
- Trade fairs, missions of trade, and exhibitions;
- Basic market areas; techniques in marketing research and export market selection;
- Trade promotion organizations and trade incentives;
- Costing and pricing;
- Import Procurement;
- Exporters;
- Standards and quality control
- Experts on marketing techniques.
- Importers;
- Banking, insurance and other financial facilities;
- Market channels;
- Trade promoting agents;
- Consultants;
- Advertising agencies;
- Product designs and designers; and
- Warehousing facilities.

Please, include all areas in which you need information related to your foreign trade activity in the space provided . \_\_\_\_\_

5. Which type of information sources do you use to obtain information in the above mentioned area? Which sources do you use most frequently? If possible rank them in the order of utilization for foreign trade activities? Please also list the type of documentary source in each group, if any.

References \_\_\_\_\_

Directories \_\_\_\_\_

Newspapers \_\_\_\_\_

Pamphlets \_\_\_\_\_

Journals \_\_\_\_\_

6. Are you satisfied with the available documentary information sources in your field?

Y \_\_\_\_ N \_\_\_\_\_

- 7 . Your educational back ground (Tick for yes)

Have you attended primary School? \_\_\_\_

Have you attended J. Secondary school? \_\_\_\_

Have you attended tertiary education? \_\_\_\_

8. For what purpose you need trade information? Please put a tick mark for agreement.

Background \_\_\_\_

Economic Analysis \_\_\_\_

Financial Management \_\_\_\_

Planning \_\_\_\_

Education \_\_\_\_\_

Profit Making \_\_\_\_\_

9. Are you aware of the existence of information service units in the following organizations and institutions?

Ethiopian Chambers of Commerce \_\_\_\_\_

Ministry of Trade \_\_\_\_\_

Ministry of NP and Economic Development \_\_\_\_\_

Adds Abaca Chamber of Commerce \_\_\_\_\_

Central Statistical Authority \_\_\_\_\_

National Bank of Ethiopia \_\_\_\_\_

10. If yes, did you visit any one of these units for seeking trade information in the past two years?

Y \_\_\_\_\_ N \_\_\_\_\_

11. Do you search the pieces of information that you require on your own?

Y \_\_\_\_\_ N \_\_\_\_\_

12. If yes, how often?

Frequently \_\_\_\_\_

Rarely \_\_\_\_\_

Always \_\_\_\_\_

If no, whom did you use when you need to get adequate information?

Agents \_\_\_\_\_

Consultants \_\_\_\_\_

Trade information units \_\_\_\_\_

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

13. Which types of trade information service units do you use most frequently in search of export and import information?

Information Centers \_\_\_\_\_

Documentation Centers \_\_\_\_\_

Computer Centers \_\_\_\_\_

Libraries \_\_\_\_\_

14. Are you aware of the existence of any international trade information systems and services?

Yes \_\_\_\_\_ No \_\_\_\_\_

15 If yes, please, mention some \_\_\_\_\_

16. What is your opinion about the trade information services in the available trade information service unit in relation to the following characteristics of information.

	Excellent	Good	Poor
Quantity	_____	_____	_____
Quality	_____	_____	_____
Currency	_____	_____	_____
Cost	_____	_____	_____
Coverage	_____	_____	_____

17. Are you aware that the Ministry of Trade, of Ethiopia has foreign based trade agents in 8 places ?

YES \_\_\_ No \_\_\_

18. If yes, do you know what their actual functions are?

YES \_\_\_ No \_\_\_

19. Do you know about the availability of some commercial attaches in the Ethiopian embassies abroad?

YES\_\_ No \_\_

20 If yes, have you ever made use of them? If yes, for what purposes? \_\_\_\_\_

---

21. What are the means and mechanisms through which you get trade information services?

Personal contacts \_\_

Membership \_\_

Purchase \_\_

Mutual cooperation \_\_

22. What type of trade information do you frequently use?

Statistical \_\_

Market \_\_

Bibliographic \_\_

Management \_\_

Others, Please specify \_\_\_\_\_

## APPENDIX 2

### SAMPLE OUTPUTS OF THE PROTOTYPE ACE SYSTEM

#### \*\*\*\* INFORMATION SYSTEM \*\*\*\*

Transcribed Name: CSA

Institutions: Central Statistical Authority

Start Date: 1972

Location: Addis Ababa

Address: P.O.Box 1143, Addis Ababa  
Telex  
Fax  
Phone 55 30 11

Head: Yohannes Tessema

Institutional Type: Government

Objective: To ensure reliable information is available to the government and people so that wise decisions may be taken. Activities: Collect, process and analyze data mainly population and housing to collect and disseminate statistical data on all areas and governmental and public institutions  
Information Service , Library Service; referral service;  
Statistical data service

Equipment: A number of micro computers, super computers and couple of mini computers

Finance: Government

Databases: Population and housing

Classification: SITC classification

Periodicals: Bulletin on all sectors

## APPENDIX 2

### \*\*\*\* BUSINESS ENTERPRISES \*\*\*\*

Name of Organization:	Universal Leather Factory
Activity:	Export
Item of Export/Import:	Leather products
Address:	P.O.Box 1094 Telex 21529 Telephone 655412 Fax 652266
Product List	Belts, wallets, Ladies hand bags, Brief cases, School bags, Coats, Jackets, and Upholstery cover
Annual Capacity	12000 items
Destination	Germany

## APPENDIX 2

### \*\*\*\*\* PROJECT PROFILE \*\*\*\*\*

Title of Project:	The Addis Ababa Leather Trading Fair, 1995
Organizer:	The Ethiopian Chamber of Commerce
Duration of the Project:	Two Weeks
last date for Application:	January, 15
Starting Date:	June 2
Ending Date:	June 17
Status of Project:	Planned
Registration Address	Addis Ababa
	Telephone 518240
	Fax 517699
	Telex 21213
Objectives:	To Promote Leather manufacturing in Ethiopia; to introduce leather products of Ethiopia in other parts of the world

## APPENDIX 2

### \*\*\*\*\* COMMODITY PROFILE \*\*\*\*\*

Commodity	Chat
Year	1992/93
Type of Item (Export or Import)	Export
Amount Exported	1936mt
Total Value (in Birr)	65257
Average Price	-
Major Destinations	Djibouti 1900mt
	Yemen 36mt
	Others -

## APPENDIX 2

### \*\*\*\*\* PROFILE OF EXPERT \*\*\*\*\*

Name:	Andualem Tegege
Birth:	1960
Sex:	Male
Marital Status:	Single
Nationality:	Ethiopian
Affiliation:	Ethiopian Chamber of Commerce
Qualification:	Economics, B.Sc. Addis Ababa University, M.Sc in Marketing Management
Specialization:	Trade information
last Employment:	Ethiopian Management Institute
Assignments:	Trade Fair Team leader
Address:	P.O.Box 517 Telex 21213 Fax 517699 Telephone 518240

## APPENDIX 2

### \*\*\*\*\* PROFILE OF INSTITUTION \*\*\*\*\*

Institution: Ethiopian Chamber of Commerce  
Location: Addis Ababa  
Start Date: 1987  
Address: P.O.Box 517  
Telex 21213  
Fax 517699  
Phone 518240  
Personnel: Civil Servants  
Head: Woubshet Workalemahu  
Type of Institution: Association  
Objectives: To promote the development of industry, trade and commerce. To introduce the countries products and business men the world market  
To encourage exporters and importers  
Activities: Up on request to translate Trade document publishing  
Information Service: Advisory Services to exporters and importers  
Publications: Ethiopian Trade Journal  
Ethiopian Trade Directory  
Tran. Name: ECC  
Finance: Members Contribution

### APPENDIX 3

#### LIST OF PERSONS INTERVIEWED

1. WOGAYEHU G. MOT, HEAD, INFORMATION PROCESSING AND ANALYSIS DIVISION
2. ERMEJACHEW R. EAL, MANAGER, CARGO TARIFFS MARKET ANALYSIS
3. ENDALKACHEW A. CSA, COMPUTER DEPARTMENT SENIOR EXPERT
4. HAILEYESUS A. AACC, EXHIBITION SECTION
5. ALMAZ K. ESA, STANDARD SENIOR EXPERT
6. GETACHEW D. MOI, HEAD, REGION 14 INDUSTRIAL DEVELOPMENT
7. AZMERAWORK M. EAL, ADVERTISING AND SALES PROMOTION REPRESENTATIVE
8. KIFLOM M. MOT, HEAD, PLANNING AND POLICY FORMULATION DEPARTMENT
9. KASSAHUN J. ECC, GENERAL SECRETARY
10. ANDUALEM T. AACC, PUBL. AND PRIN. DEPT.
11. ADMASSU G. ECC, TRADE FAIRS AND EXHIBITIONS TEAM LEADER
12. TEKALEGNE A. ECC, HEAD, TRADE INFORMATION SYSTEMS DIVISION
13. BENTI M. IOE, HEAD, INFORMATION AND COMPUTER SYSTEMS
14. BERHANU G. MOT, INFORMATION PROCESSING AND ANALYSIS DIVISION
15. MESERET T. MOT, INFORMATION WORKER
16. ZEKARIAS W. MOI, COMPUTER DEPARTMENT
17. ESHETU T. AACC, ACADEMICIAN
18. ABEBE S. AACC, RESEARCHER
19. ESHETU K. STCE, HEAD, COMPUTER DIVISION

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9. KASSAHUN J. ECC, GENERAL SECRETARY
10. ANDUALEM T. AACC, PUBL. AND PRIN. DEPT.
11. ADMASSU G. ECC, TRADE FAIRS AND EXHIBITIONS TEAM LEADER
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13. BENTI M. IOE, HEAD, INFORMATION AND COMPUTER SYSTEMS
14. BERHANU G. MOT, INFORMATION PROCESSING AND ANALYSIS DIVISION
15. MESERET T. MOT, INFORMATION WORKER
16. ZEKARIAS W. MOI, COMPUTER DEPARTMENT
17. ESHETU T. AACC, ACADEMICIAN
18. ABEBE S. AACC, RESEARCHER
19. ESHETU K. STCE, HEAD, COMPUTER DIVISION

#### APPENDIX 4

### INSTITUTIONS AND ORGANIZATIONS WHICH DIRECTLY OR INDIRECTLY PROMOTE THE DEVELOPMENT OF FOREIGN TRADE IN ETHIOPIA

- (1) Ministry of Trade of Ethiopia;
- (2) Ethiopian Chamber of Commerce;
- (3) Investment Office of Ethiopia;
- (4) Central Statistical Authority of Ethiopia;
- (5) Ministry of Industry of Ethiopia;
- (6) Addis Ababa Chamber of Commerce;
- (7) Ethiopian Standardization Authority;
- (8) Maritime and Transit Corporation of Ethiopia;
- (9) Ethiopian Air Lines;
- (10) Ethiopian Customs Authority;
- (11) National Bank of Ethiopia;
- (12) Ethiopian Freight Transport Corporation;
- (13) Ethiopian Shipping Lines; and
- (14) Commercial Bank of Ethiopia;

APPENDIX 5

QUESTIONNAIRE TO SURVEY ORGANIZATIONS ENGAGED IN PROMOTING  
EXPORT AND IMPORT TRADE IN ETHIOPIA

1. Name of organization \_\_\_\_\_

2. Do you render trade information services?

Y \_\_\_ N\_\_\_

3. If yes, do you have a trade information service unit in your organization?

Y \_\_\_ N \_\_\_

4. What type of trade information service units do you have?

Libraries \_\_\_\_\_

Documentation Unit \_\_\_\_\_

Information Centers \_\_\_\_\_

Computer centers \_\_\_\_\_

CD-ROM Databases \_\_\_\_\_

5. Do you render any type of trade information services to out side users?

Y \_\_\_ N

6. Do you access trade information from other institutions? If yes , what mechanisms you  
use to get the trade information that serves your clients?

Purchase \_\_\_\_\_

Exchange \_\_\_\_\_

Donation \_\_\_\_\_

Mutual Agreement \_\_\_\_\_

7. If you do generate trade oriented or related information locally what type of trade information do you generate?

Market related \_\_\_\_\_

Statistical \_\_\_\_\_

Bibliographic \_\_\_\_\_

Management \_\_\_\_\_

Other, please specify \_\_\_\_\_

8. Are there any restriction to have access in trade information or in the use of your information service units?

Y \_\_\_\_\_ N \_\_\_\_\_

9. If, access to your trade information service is a restricted one, who are the specific users of the pieces of information generated or available in your information service unit?

Please specify \_\_\_\_\_

10. Who are the most likely users of your information system?

Researchers \_\_\_\_\_

Policy makers \_\_\_\_\_

Students \_\_\_\_\_

Exporters \_\_\_\_\_

Importers \_\_\_\_\_

Agents \_\_\_\_\_

Consultants \_\_\_\_\_

Others, please mention \_\_\_\_\_

11. What type of information services are available in your information service unit?

Selective dissemination of information \_\_\_\_\_

Current awareness service \_\_\_\_\_

Reprography services \_\_\_\_\_

Cataloguing, indexing, and abstracting \_\_\_\_\_

Advisory services \_\_\_\_\_

Access to bibliographic and factual databases \_\_\_\_\_

On line access to information \_\_\_\_\_

Consolidation and repackaging of information \_\_\_\_\_

12. Do you think that your information services have been used extensively?

Y \_\_\_\_\_ N \_\_\_\_\_

13. If no, what do you think are the causes for the under utilization of your information service system?

Lack of awareness of users about the availability of your system \_\_\_\_\_

The services fee \_\_\_\_\_

Trade information seeking behaviour of users is low \_\_\_\_\_

Your service level is low \_\_\_\_\_

Number of variables that needs to be taken into account \_\_\_\_\_

Size of the enterprises \_\_\_\_\_

Nature of export and import activities \_\_\_\_\_

14. Have you ever carried out a user study?

Y \_\_\_\_\_ N \_\_\_\_\_

15. If yes, what were the results? Have you changed or improved the services accordingly? \_\_\_\_\_

11. What type of information services are available in your information service unit?

Selective dissemination of information \_\_\_\_

Current awareness service \_\_\_\_\_

Reprography services \_\_\_\_\_

Cataloguing, indexing, and abstracting \_\_\_\_

Advisory services \_\_\_\_\_

Access to bibliographic and factual databases\_\_\_\_\_

On line access to information \_\_\_\_\_

Consolidation and repackaging of information \_\_\_\_

12. Do you think that your information services have been used extensively?

Y \_\_\_\_ N \_\_\_\_

13. If no, what do you think are the causes for the under utilization of your information service system?

Lack of awareness of users about the availability of your system \_\_\_\_\_

The services fee \_\_\_\_\_

Trade information seeking behaviour of users is low \_\_\_\_

Your service level is low \_\_\_\_\_

Number of variables that needs to be taken into account \_\_\_\_\_

Size of the enterprises \_\_\_\_\_

Nature of export and import activities\_\_\_\_\_

14. Have you ever carried out a user study?

Y \_\_\_\_\_ N \_\_\_\_\_

15 If yes, what were the results? Have you changed or improved the services accordingly? \_\_\_\_\_

16 If no, why not? \_\_\_\_\_

17. What do you think about the level of use of your information services units

Adequate \_\_\_\_\_

Not adequate \_\_\_\_\_

Sufficient \_\_\_\_\_

Excellent \_\_\_\_\_

18. What are the most likely used trade information sources?

Explain \_\_\_\_\_

19. Do you think that there is a relation ship between the educational or occupational background of users of trade information ?

Explain \_\_\_\_\_

20. What are the problems that are encountered in rendering trade information services?

21. What are your general views about trade information and trade information services ?

-

-

---

22 Do you think that there is a specific need for trade information network in Ethiopia?

Y \_\_\_\_ N \_\_\_\_

If yes which should be possible nodes for the Network?

-

-

---

23. Any additional comments \_\_\_\_\_

---

---

## APPENDIX 6

Questionnaire developed to develop experts profile and to acquire their view in relation to the available trade information service systems.

1. Name of the organization \_\_\_\_\_

Position of the respondent \_\_\_\_\_

Academic qualification \_\_\_\_\_

Area of specialization \_\_\_\_\_

2. Do you need export and import trade information?

Y \_\_\_\_\_ N \_\_\_\_\_

If yes, what is your professional occupation

Exporter \_\_\_\_\_ Researcher \_\_\_\_\_

Politician \_\_\_\_\_ Importer \_\_\_\_\_

Teacher \_\_\_\_\_ Policy Maker \_\_\_\_\_

Manufacturer \_\_\_\_\_ Student \_\_\_\_\_

Industrialist \_\_\_\_\_ Consultant \_\_\_\_\_

Advisor \_\_\_\_\_

Other \_\_\_\_\_

3. Your educational back ground.(please tick for yes)

Have you attended primary School? \_\_\_\_\_

Have you attended J. Secondary school? \_\_\_\_\_

Have you attended tertiary education? \_\_\_\_\_

4. For what purposes you need trade information? Please put a tick mark.

Background \_\_\_\_\_

Economic Analysis \_\_\_\_\_

Financial Management \_\_\_\_\_

Planning \_\_\_\_\_

Education \_\_\_\_\_

Profit Making \_\_\_\_\_

others, please mention \_\_\_\_\_

5. Are you aware of the existence of the following information service units ? Please tick for awareness.

Ethiopian Chambers of Commerce \_\_\_\_\_

Ministry of Trade \_\_\_\_\_

Ministry of NP and Economic Development \_\_\_\_\_

Adds Abaca Chamber of Commerce \_\_\_\_\_

Central Statistical Authority \_\_\_\_\_

National Bank of Ethiopia \_\_\_\_\_

6. If yes, did you visit one of these units for seeking trade information for the past two years? Y \_\_\_ N \_\_\_

7. Do you search the pieces of information that you require on your own?

Y \_\_\_ N \_\_\_

8. If yes, how often?

Frequently \_\_\_\_\_

Rarely \_\_\_\_\_

Always \_\_\_\_\_

If no, whom do you use when you need to get adequate information?

Agents \_\_\_\_\_

Consultants \_\_\_\_\_

Trade information units \_\_\_\_\_

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

9. Are you aware of any international trade information systems and services?

Yes \_\_\_\_\_ No \_\_\_\_\_

10 If yes, please, mention some \_\_\_\_\_

11. What is your opinion about the trade information services in the available trade information service units in relation to the following criterion:

	Excellent	Good	Poor
Quantity	_____	_____	_____
Quality	_____	_____	_____
Currency	_____	_____	_____
Cost	_____	_____	_____
Coverage	_____	_____	_____

12. Are you aware that the Ministry of Trade, Ethiopia has foreign based trade agents in 8 places?

YES \_\_\_\_\_ No \_\_\_\_\_

13. If yes, do you know what their actual functions are?

YES \_\_\_\_\_ No \_\_\_\_\_

14. Do you know that there are commercial attaches in the Ethiopian embassies abroad?

YES \_\_\_\_\_ No \_\_\_\_\_

15 If yes, have you ever made use of them? If yes, for what purposes? \_\_\_\_\_

\_\_\_\_\_

16. What are the means and mechanisms through which you get trade information services?

Personal contacts \_\_\_\_\_

Membership \_\_\_\_\_

Purchase \_\_\_\_\_

Mutual cooperation \_\_\_\_\_

17. What type of trade information do you frequently use?

Statistical \_\_\_\_\_

Market \_\_\_\_\_

Bibliographic \_\_\_\_\_

Management \_\_\_\_\_

Others, Please specify \_\_\_\_\_

18. What sources of trade information do you frequently use? Please write the documentary sources of information in each category.

References \_\_\_\_\_

Directories \_\_\_\_\_

Newspapers \_\_\_\_\_

Pamphlets \_\_\_\_\_

Journals \_\_\_\_\_

19. Are satisfied with the available documentary information in your field?

Y \_\_\_\_ N \_\_\_\_

APPENDIX 7

COMMODITY PROFILE FORMAT

(Please type or print. Use a separate form for each product)

A. Company name: \_\_\_\_\_

B. Product (detailed description, include specifications/grading): \_\_\_\_\_

C. Brand name (if any): \_\_\_\_\_

D. Tariff number: \_\_\_\_\_

E. Production(if applicable):

1. Annual capacity (Unit: \_\_\_\_\_) \_\_\_\_\_

2. Annual output (Unit: \_\_\_\_\_) \_\_\_\_\_

F. Export during latest 3 years: (Volume unit: \_\_\_\_\_)

Year	Volume	Value	Main countries of destination
------	--------	-------	-------------------------------

_____	_____	_____	_____
_____	_____	_____	_____

G. Quantities available for export (Volume unit: \_\_\_\_\_)

1. Minimum per

2. Maximum per

3. Per year:

order

order

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

H. Description of export packaging: \_\_\_\_\_

I. Delivery period from date of receipt of order:

J. Terms of shipment

\_\_\_\_\_

k. Terms of payment

\_\_\_\_\_

L. Sales aids available: 1. Samples [ ] 2. Price list

3. Catalogues [ ] 4. Photographs [ ] 5. Other [ ]

## APPENDIX 8

## ABNCD+ DATABASE FIELD DEFINITION

TABLE (FDT)

Tag	Name	Len	Typ	Rep	Delimiters/
1	Participation Centre acronym	10	X		
2	Participating centre record number	6	N		
3	Record Status	1	P	A	
5	Date record entered	25	X		999-99-99
6	Date record changed	10	P		9999-99-99
7	Bibliographic level	5	A		
8	Bibliographic Level - parent	1	A		
9	Country of origin	2	P		
10	Record number of parent	6	N	R	
11	Record number(s) of part(s)	6	N	R	
12	Record number of other language version(s)	6	N		
20	Language of analysis	18	A		
21	Language(s) of of text	2	A	R	
22	Language(s) of summaries	2	A	R	
25	Record of heading	50	X		
100	Title	500	X		
101	Parallel title(s)	500	X	R	
102	Translated title - English	500	X		
103	Translated title - French	500	X		
104	Translated title - Spanish	500	X		
105	Translated title - other	500	X		
110	Personal author(s)	80	X	R	ab
111	Corporate author(s)	500	X	R	abcdz
112	Affiliation	500	X		abcdz
113	Other associated inst(s)	500	X	R	abcdez
114	Meeting	500	X	R	abcde
115	Trans. name of institution	200	X		
120	Edition	25	X		
121	Publisher	250	X		abcd
122	Date of publ/issue - free form	30	X		

123	Date of publ/issue - ISO form	10	P	9999-99-99
130	Collation (M/C)	200	X	abcdefghij
131	Part statement	150	X	ab
140	Monographic seriex	200	X	abz
141	Thesis	200	X	abcd
142	Project	200	R	ab
150	Notes	700	X	
160	ISBN	13	X	R
161	Document number	50	X	R
162	Availability	100	X	
200	Title of serial	400	X	z
201	ISSN	9	P	9999-999x
202	Title of parent (M/C)	500	X	
210	Personal author(s) - parent	80	X	R ab
211	Corporate author(s) - parent	500	X	R abcdz
300	Primary descriptors	200	X	
301	Secondary descriptors	400	X	
302	Geographic descriptors	200	X	
303	Local descriptors	200	X	
304	Proposed descriptors	100	X	
310	Abstract	1000	X	
320	Broad subject heading	100	X	
400	Processing status	4	X	
410	Location	10	X	R
411	Call number	40	X	
412	Number of copies	2	N	
420	Type of material	20	X	f
430	Documentalist	10	X	R
500	Acquisition type	4	X	
508	Order number	25	X	
510	Date ordered	10	P	9999-99-99
511	Date claimed	10	P	9999-99-99
512	Date received	10	P	9999-99-99
513	Number of copies	2	N	
514	Requester	25	X	R
515	Supplier	200	X	abncdez

516	Price	20	X	ab
517	Acquisition notes	200	X	R
900	Corporate body	500	X	abcd
901	See refernce(s)	500	X	R
903	Other language version(s)	500	X	R
904	Former name(s)	500	X	R
905	Later name(s)	500	X	R
908	Reference code	20	X	
911	Serial title	400	X	
912	ISSN	9	P	
913	See reference(s)	400	X	R
914	See also other language edition	400	X	R
915	Former name(s)	400	X	R
916	Latter name(s)	400	X	R
921	Supplier authority code	4	X	
922	Supplier name & address	200	X	
997	Authority record notes	200	X	
998	Authority record date	10	P	9999-99-99
390	Address/phone, etc	400	X	abcdefghi
393	Sex	10	X	
441	Duration	50	X	
442	Date: Proposal/approval	25	X	ab
443	Date: Starting	10	X	
444	Date: expect, completion	10	P	9999-99-99
445	Date: actual completion	10	P	9999-99-99
446	Date: terminated	10	P	9999-99-99
447	Date of birth	10	P	9999-99-99
835	Marital status	100	X	
830	Nationality	100	X	
831	Qualifications	200	X	R abcd
832	Specialization	200	X	R
833	Work experience (last)	500	X	abcde
834	Current work	200	X	abcde
855	Honours and awards	200	X	R abc
856	Membership in societies	200	X	R abcd
525	Language competence	100	X	R

556	Assignments	200	X	R	abcd
900	Services offered	400	X	R	
895	Databases	300	X	R	ndrfa
896	Classification system	100	X	R	
897	Subject headings list	100	X	R	
898	Thesaurus	100	X	R	
899	Periodical publication	300	X	R	ij
890	Patents taken	200	X	R	abcdefgh
850	Recommended by	100	X	R	abcd
570	Personnel	100	X	R	ab
625	Objectives	500	X	R	
700	Financial aspects	200	X	R	sacp
950	Project status	50	X		
951	Related projects	200	X	R	
954	Project number	50	X	R	a
955	Contract number	50	X	R	
957	Resources (equipment...)	200	X	R	
960	Type of institution	100	X	R	
961	Type of research	100	X	R	
998	Record type	1	P	A	
1000	File ID	2	X		

A - Insert (after)

B - Insert (before)

C - Change line

D - Delete line

P - Previous page

N - Next page

T - Top

E - Bottom

Y - Next line

X - Exit

Source: Abebe Rorissa et al, 1992.

## DECLARATION


This thesis is my original work and has not been presented for a degree in any other university.



**Gezahegn Sebsbie**

**May 24, 1995**

The thesis has been submitted for examination with our approval as university advisors.



**Professor G. Bhattacharyya**

**May 24, 1995**



**Ato Nega Alemayehu**

**May 24, 1995**