

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

INVESTMENT AND INNOVATION POLICY REVIEW

ETHIOPIA



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UNITED NATIONS

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INVESTMENT AND INNOVATION POLICY REVIEW

ETHIOPIA



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ABBREVIATIONS

AACC	Addis Ababa Chamber of Commerce
ADLI	Agricultural-Development-Led Industrialization
ALID	Agriculture-Led Industrial Development
APDF	Agricultural Production Development Fund
ARTD	Agricultural Research and Training Project
AUA	Alemaya University of Agriculture
BOI	Board of Investment
CGIAR	Consultative Group for Agricultural Research
COMESA	Common Market for Eastern and Southern African Countries
DBE	Development Bank of Ethiopia
EA	Ethiopian Airlines
EARO	Ethiopian Agricultural and Technology Commission
EIA	Ethiopia Investment Authority
ECST	Ethiopian Commission for Science and Technology
ELICO	Ethiopian Leather Industrial Corporation
EMDC	Ethiopian Management Development Centre
ENA	Ethiopian News Agency
EPA	Ethiopian Privatization Agency
ESE	Ethiopia Seed Enterprise
ET	Ethiopian Television
ETC	Ethiopian Tourism Commission
FDI	Foreign Direct Investment
IAR	Institute of Agricultural Research
ICC	International Chamber of Commerce
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporate
ISI	Import Substitution Industrialization
MEDAC	Ministry of Economic Development and Cooperation
MFA	Ministry of Foreign Affairs
MNC	Multinational Corporation
MOA	Ministry of Agriculture
MOTI	Ministry of Trade and Industry
NARS	National Agricultural Research System
NFIA	National Fertilizer Industry Agency
NIS	National Innovation System
NLSC	National Leather and Shoe Corporation
NSIA	National Seed Industry Agency
OIO	Oronia Investment Officer
QSAE	Quality and Standards Authority of Ethiopia
RDA	Regional Development Agencies
RIO	Regional Investment Officer
TNC	Transnational Corporations
SME	Small- and medium-sized enterprises

PREFACE

The UNCTAD secretariat carries out two types of national policy reviews namely, the Investment Policy Review (IPR) and Science, Technology, and Innovation Policy (STIP) Review. These reviews, carried out at the request of Governments, are intended to assist interested member States in formulating national investment and technology policies through an in-depth country level analysis and by sharing experiences with other developing countries. At the request of the Government of Ethiopia, this review combines elements of both IPR and STIP in an integrated manner to assess how the country could develop its technological and innovative capabilities with a view to enhancing supply capacity and attracting foreign direct investment (FDI).

In preparing this report, the secretariat was assisted, especially during the field visit to Ethiopia, by the Ethiopian Investment Authority (EIA) and the Ethiopian Commission on Science and Technology (ECST). These agencies also collaborated in the preparation of background documents that helped define the specific areas of focus for the review process. The support provided by EIA and ECST as well as the Permanent Mission of Ethiopia to the United Nations Organizations in Geneva, which assisted with logistical arrangements, was vital for the successful completion of the report.

The report benefited from contributions by international experts, the UNCTAD secretariat and UNIDO. The international experts included Norman Clark, John Finn and Banji Oyelaran-Oyeyinka. The leather sector contribution was prepared by UNIDO under the responsibility of Aurelia Calabro. The review process was undertaken by the Division on Investment, Technology and Enterprise Development (DITE) of the UNCTAD secretariat, under the overall responsibility of Taffere Tesfachew. The review team wishes to thank all those who provided valuable comments to the first draft of this report presented in a Workshop held at Addis Ababa, Ethiopia. Appreciation is also extended to Lynn Mytelka, Helen Argalias, Khalil Hamdani, Fiorina Mugione, Mussie Delelegn and Taddele Taye for their comments and Debbie Wode-Berhan and Lilian L. Mercado for providing timely secretarial assistance.

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Introduction

With the signing of the peace agreement between Ethiopia and Eritrea in December 2000, effectively ending the two-year conflict between the neighbouring countries, there is a renewed hope that Ethiopia will regain the economic growth momentum that it experienced in the post 1992 liberalization period. Key ingredients for renewed growth are increased investment, both domestic and foreign, in supply capacity, including physical infrastructure, the generation of relevant skills and the development of competitive enterprises through local technological and innovative capability building.

Investment is, without doubt, one of the primary engines of growth in all economies. However, its effectiveness rests on strong complementarities with other elements in the growth process, most notably technological progress, skills acquisition and the development of innovative capability. These elements make investment a natural point of departure for Governments seeking to formulate a robust development strategy. The link between investment and these other determinants of growth, however, is not an automatic process. It requires among other things a favourable macro policy environment and specific policies and institutions aimed at encouraging savings and attracting and directing investment to key sectors in the economy thereby enhancing the contributions of investment to skills formation, technological change, competitiveness and economic growth. A clear understanding of how such a synergy between investment policy on the one hand and technological progress on the other can be created is an essential prerequisite for designing an effective national investment policy and investment promotion strategy.

As shown in table 1, domestic investment in Ethiopia has increased rapidly since the introduction of liberal policies in 1992. However, the gap between domestic investment and savings has remained wide thereby reinforcing the need for FDI in the development of the economy. Between 1990 and 1997, gross domestic investment as a proportion of GDP rose from 11.9 per cent to 19.1 per cent, while gross domestic savings remained at the same rate. A large part of the increase in investment has been attributed to the private sector whose share increased from 2.5 per cent to 13.1 per cent. Public sector investment increased only marginally from 6.4 per cent to 7.4 per cent. It would appear, therefore, that if a high level of private investment is to be maintained, concerted efforts should be made to promote domestic savings.

At present, the savings gap in Ethiopia is met through investments generated from foreign savings, more specifically, development assistance and FDI.¹ FDI flows to Ethiopia and the country's investment framework are examined in Chapter Two. It shows that although the investment climate has improved greatly in recent years, there are still many aspects of investment promotion where improvements are urgently needed. More importantly, Ethiopia does not yet have an investment promotion strategy nor does it have a clear vision of where it fits into the global

¹ The IMF, the World Bank and other multilateral and bilateral donors have consistently supported the economic policy reform programme in Ethiopia. This indicates the level of trust and confidence that donors have placed on the Government and its efforts to change the political and economic policy-orientation of the country.

investment strategies of transnational corporations (TNCs).² At the time of writing this report, investment policy/strategy in Ethiopia basically consisted of broad statements of development objectives and an investment code elaborating the investment framework and the sectoral activities identified by the Government as priority investment areas. Therefore, the need to develop an investment promotion strategy and a vision of the country's investment objectives and expectations is urgent.

Be that as it may, the liberalization measures undertaken in the post 1992 period have encouraged foreign investment flows into the country. For a large country — the second most populous in Africa — with great potential, in terms of resource endowment and geographical position, it should be considered an attractive location for foreign investment. However, the quantity of FDI that entered the country in the past decade was disappointingly small when compared to other countries in the region. The cumulative FDI inflow to Ethiopia for the period 1994 to 1997, a time of economic growth and rapid private sector development, illustrates this point clearly. The cumulative inflow during this period was equivalent to 0.2 per cent of total inflow to Sub-Saharan Africa. Compared to other countries in the region, the amount of foreign investment in Ethiopia during this period was equivalent to only 5.3 per cent of FDI inflow to Uganda, 5.4 per cent to United Republic of Tanzania, 34 per cent to Kenya, 0.9 per cent to Egypt and 1.8 per cent to Morocco. In comparison with other countries in the region, therefore, the total FDI inflow into Ethiopia in the past decade has been insignificant.

As the country enters a new post-conflict era, renewed and concerted efforts are required to increase FDI inflow and to ensure that it contributes to improvements in domestic supply capacity, skills, physical infrastructure, export diversification, technological development and economic growth. However, in mapping out a strategy for attracting FDI, two critical points need to be taken into account.

First, FDI is a complement rather than a substitute to domestic investment. Therefore, efforts to attract foreign investment must not overshadow those aimed at boosting domestic investment through higher domestic savings. Indeed, ultimately, the objective should be to develop a vibrant and growing domestic enterprise sector supported by domestic investment.

There is ample evidence to show that, in the long-term, this process by itself is the best strategy for attracting FDI as foreign investment tends to be strongly attracted to countries that have achieved sustained rates of economic growth, market development and where domestic investment is large enough to generate dynamic and technologically advanced enterprises.

Second, in the current global economic environment, policies and incentive schemes designed to attract foreign investment and to build the competitiveness of domestic enterprises must take into account changes that are taking place in the global economy, in particular the new mode of competition generated by rapid technological changes and globalization. As an emerging economy with an open and outward-oriented trade regime,

² However, the authorities in Ethiopia recognize this limitation. Indeed, at the end of 1999, the Government of Ethiopia requested the Foreign Investment Advisory Service (FIAS) to design, in collaboration with the Ethiopian Investment Authority, a strategy for the promotion of foreign direct investment. The new strategy is expected to be operational in 2001.

Ethiopia cannot escape the effects of these fundamental changes in the global economy and their implications for competitiveness and FDI inflows. Awareness of evolving global trends by policy-makers is essential for designing a realistic and an effective investment and development strategy.

The following three aspects of fundamental changes taking place are worth noting:

The first relates to the growing knowledge-intensity of production and its generalization across all sectors of the economy.³ Increasingly, knowledge inputs, in particular investments in new technologies and the skills associated with it, have become important components of production activities and in some cases, overshadowing investments in tangible goods such as machinery and equipment. Moreover, this trend is not confined exclusively to high-tech industries or developed countries only but also to developing countries and the so-called traditional industries such as textile, forestry, horticulture, leather and food processing. Box 1, illustrates the importance of knowledge inputs in assisting small-scale African farmers to secure markets globally.

Second, with knowledge-intensity, increasing volume of information essential for competitiveness and the decision-making process is generated. This requires organizational skills to ensure vertical and horizontal information flows to relevant agents within the system. Unfortunately, the process of information and knowledge flows in many developing countries such as Ethiopia is still a significant problem. Lack of institutional capacity and a hierarchical approach to decision making prevents horizontal interactions among key stakeholders in the system. This could be detrimental to investment promotion and technological development because of the conflicting or wrong signals it may send to potential investors.

Third, in conjunction with the above trends, the ability to learn, innovate, produce and utilize knowledge, initiate organizational changes and generally adjust rapidly to changing market conditions have become important determinants of competitiveness. This is not to imply that other factors such as price no longer hold a dominant position as competitive factors. Far from it. The cost of production still matters and in fact, for some products and markets, it is an important source of competitive advantage. Moreover, innovative activities have the impact of reducing the cost of production, for example, through the introduction of energy saving methods and the development of alternative and cheaper raw materials. The point is, as diversification into higher-value products takes place, knowledge and innovation-based competition as well as factors such as quality, flexibility and design are becoming critical elements for the survival of enterprises both in home markets and abroad. Today, dynamic enterprises are those that compete not only on price but also on the basis of their ability to acquire knowledge and sustain a process of innovation — designing new products, ensuring high quality output, modifying product processes and improving eco-efficiency. This calls for investment and development policies that encourage knowledge flows and innovative activities including the generation of a highly skilled labour force through formal learning and on the job training

³ The concept of knowledge, as applied here, entails more than the results of R&D. It is a concept that includes product design, quality control, process engineering, management routines, marketing, information processing, maintenance, investment and change capabilities as well as networking and partnering skills.

What does all this imply for low-income developing countries like Ethiopia aiming to improve competitiveness and integration into the global economic system by attracting foreign investment and technology? If acquiring innovative capability is becoming increasingly important for competitiveness, how can enterprises in a least developed country (LDC) such as Ethiopia develop competitive advantages on the basis of innovation? How useful is the concept of innovation in such a country where the productive population consists overwhelmingly of subsistence farmers and artisans with low purchasing power and, thus, limited effective demand for new and improved technologies? Will enhancing local innovative capabilities enable Ethiopia to create an economy attractive to FDI? The answer to the last question is an emphatic yes.

While the focus of this report is on investment policy, it gives special attention, at the request of the Government of Ethiopia, to local technological development and the process of innovation and their implications for investment and competitiveness. For many policy-makers as well as organizations, innovation is synonymous with inventions or major technological breakthroughs. The latter is assumed to take place in specialized scientific or research and development (R&D) centres. The image one gets is of a lonely scientist in a laboratory discovering new possibilities, often after a lengthy period of research. Although such activities are vital for advancing the frontiers of technology, they contrast radically with the reality of the innovative process in a highly competitive environment. Nowadays, innovative activities are aimed at maintaining competitive advantages and tend to be continuous, incremental and take place predominantly at the enterprise level. They require interactions between key agents in the production system (for example, between users and producers; between the knowledge producing sector such as universities and R&D institutions and enterprises; between domestic and foreign enterprises) and need investment in learning, including at the enterprise level.

The notion of innovation, as defined in this report, refers to "a process by which firms master and implement the design and production of goods and services that are new to them, irrespective of whether or not they are new to their competitors - domestic or foreign".⁴ Defined as such, the innovation process encompasses the wide range of incremental changes that enterprises in both developed and developing countries undertake in order to enhance their competitive advantages through improvements in product design, technical performance and product quality and by introducing changes in organizational structures, management style, marketing and maintenance routines as well as other knowledge intensive elements of production. Unfortunately, however, efforts by enterprises to introduce such changes receive very little attention, if at all, from policy-makers, as they are not considered innovative activities. It is important that this misconception is corrected and developing countries begin to initiate debate on the innovation process and how they can generate a culture of innovation within enterprises. This report aims to emphasize the importance of paying greater attention to the concept of innovation, as defined above, in the context of designing policies to attract investment and enhance the competitiveness of domestic enterprises.

The report is structured as follows. Chapter I briefly examines the recent policy changes in Ethiopia and the factors that determine its potential as an attractive location for FDI. Chapter II

⁴ Ernst et al., 1998.

reviews the investment policy of Ethiopia and the recent trends in FDI flows, the sectoral and regional distribution and the institutional arrangements for attracting foreign investment. At the request of the Government of Ethiopia, the report has focused its analysis on selected sectors and issues. As a result, Chapter III reviews the country's strategy for agricultural development. Specifically, it reviews the potential for improving productivity and attracting investment into the sector through technological changes and innovation. Case studies are used to analyze linkages with industry. Indeed, since 1992, the Government of Ethiopia has identified Agricultural Development-Led Industrialization (ADLI) as the main focus of its overall national development strategy. In line with this objective and at the request of the Government, Chapter IV evaluates the opportunities for investment and innovation in one of the branches of the agro-business sector in which Ethiopia has comparative advantage namely, the leather and leather products industry. The value chains in the production of leather-related goods, the strength and weaknesses of the leather goods production system in Ethiopia and the policies and institutions supporting the sub-sector are analyzed. In Chapter V, the potential for enhancing investment and innovation among SMEs in Ethiopia is examined. SMEs make up the largest and the most important segment of the industrial sector in Ethiopia. Finally, Chapter VI presents the conclusions and policy recommendations of the report.

Table No. 1

ETHIOPIA
INDICATORS OF MACROECONOMIC PERFORMANCE

Indicator / Year	1989	1990	1991	1992	1993	1994	1995	1996	1997
Real GDP Growth %	1.6	- 0.4	-6.0	12.0	1.7	1.6	6.2	10.6	5.2
Gross Capital Formation % GDP	13.7	11.9	9.7	8.7	13.2	13.6	15	17	19.1
Domestic Saving, % GDP	8.4	7.6	3.2	2.8	5.8	4.6	6.0	5.8	
Annual Rate of Inflation	7.8	5.2	35.7	10.5	3.5	7.6	10.1	-5.1	-3.7
GDP per capita, (*ppp \$)	392	369	370	-----	420	-----	455	-----	-----
Exchange Rate: Birr/\$1	2.07	2.07	2.07	2.81	5.00	5.47	6.15	6.35	6.71
Growth in International Reserves (months of import coverage)	1.1	0.6	1.0	-----	3.1	4.3	4.3	-----	-----

*ppp purchasing power parity

Source: IMF, Investment Financial Statistics
 The Economist Intelligence Unit, EIU (Ethiopia 1997, 1998, 1999)
 Human Development Report (From 1990 to 1998 annual reports)
 World Development Report (1997, 1998/1999)
 International Marketing Data and Statistics 1999 (23rd edition)

Box 1

Fresh Food global sourcing

Hilbre Farm, Zimbabwe, employs 1,000 workers, exporting fresh mangoes, asparagus, baby carrots, baby corn and sugarsnap peas to Europe, Australia and the Far East. The elements of water, cheap plentiful labour, a large farm, which provides economies of scale and a climate that facilitates different crops to be produced year round, have always been there. What has changed recently is the cost of two vital links in the chain: **transport** and **information**. Airfreight is now so cheap as to make the shipment of vegetables economic, and computers and special software enable Hilbre and its customers to make, track and record orders all the way from the field to the dining room table.

Seeds are planted every four days, according to a schedule laid out by Hilbre's United Kingdom agent; Arbor International of Ascot, Berkshire, which takes responsibility for the product from the seed to shopping basket. Planting patterns are calculated using historic buying patterns provided by United Kingdom supermarkets. Also, packing schedules change daily in response to information passed from United Kingdom to Zimbabwe via Electronic data Interchange, reflecting previous day's sales in the supermarkets.

Hilbre farm sells 120 tonnes of vegetables a month to industrial countries. It is the main supplier of baby corn and out-of-season asparagus to Marks and Spencer, and also supplies other British supermarket chains such as Sainsbury's, Asda and Safeway, as well as stores in France and even Australia.

Proximity to Harare international airport and low cost airfreight and investments in knowledge inputs are important elements in Hilbre's competitiveness. The vegetables are packed in containers, cooled with cold air, and loaded onto planes for take off. The next day in the United Kingdom the vegetables are distributed to regional depots.

Source: M. Prest and D. Bowen, 1996, "Vegetables Magic", 'Independent on Sunday', Business, Section, July 7th 1996.

CHAPTER I

National determinants of investment flows into Ethiopia

There are a number of positive strategic factors that makes Ethiopia an attractive location for foreign investment. Some of these positive elements include:

- ◆ A large domestic market and a unique geographical location enabling investors in Ethiopia to service markets and customers in East Africa, North Africa and the Middle East and to competitively supply specific products to selected European markets. These are all reasonably affluent markets with positive growth prospects over the medium-term;
- ◆ A unique history, national culture and tradition with a pool of highly educated and dedicated elite to draw upon as managers and advisors, with English (the language of business) widely spoken;
- ◆ A resurgent private enterprise ethos, with a portfolio of local and regional enterprises established by indigenous entrepreneurs that deserves to be better promoted including an emerging group of internationally recognized companies (e.g. Ethiopian Airlines) that have already established a competitive market presence;
- ◆ A comparatively safe and less corrupt business and social environment that stands out in stark contrast to many other countries and a generally friendly and helpful attitude to foreigners;
- ◆ A capital city that hosts the headquarters of the Organization of African Unity, the Economic Commission for Africa and other regional organizations as well as a significant cosmopolitan middle class with experience in international business;
- ◆ An attractive climate and an evolving tourism sector that combines antiquities with wildlife and visual beauty.

A national strategy to encourage investment inflow into Ethiopia must build on these positive elements, in conjunction with other determinants. Often, a diverse and complex set of factors determine the timing, scale and quality of investment inflow. Mapping out other determinants of inward investment flows and identifying appropriate policy response is necessary in order to design an effective investment promotion strategy. This Chapter will identify some of these factors starting with recent reforms in the political and economic sphere introduced by the current Government of Ethiopia.

In the last three decades, Ethiopia has undergone major socio-economic and political transformations ranging from a feudal system to socialist and more recently an open market-based economy and democracy. These changes have been accompanied by various attempts at institutional reform including the introduction of a new Constitution in 1993 which paved the way for the movement toward federalism. The Constitution provides for a federal system based upon nine regions and two chartered cities, each of which is endowed with legislative, executive and judicial powers pertaining to all matters within their borders except those related to defence, foreign affairs, macroeconomic policy and the printing of currency.

The "socialist period", from 1975 to 1991, was marred by political turmoil, a prolonged armed conflict and economic restructuring based on a centralized planning system. Comprehensive nationalization of private enterprises, including foreign-owned enterprises, were carried out. The private sector was virtually reduced to micro- and small-scale manufacturing activities. By the time the socialist regime was removed in 1991, over 95 per cent of the modern sector output in food processing, textiles, beverages, tobacco and leather and footwear industries were produced by public sector manufacturing enterprises. The public sector also employed over 70 per cent of the workforce in the industrial sector. This legacy has dictated the nature and context policy reforms introduced in the last decade.

A. Recent Changes the Macro-policy Environment

A plethora of macro-policy reforms have been implemented since 1992. They include: the liberalization of trade policy; privatization of public sector enterprises; financial sector reforms; and deregulation of prices and exchange rate controls. Non-tariff barriers have been eliminated. Import tariffs have been progressively reduced from a maximum rate of 200 per cent before the reforms to a current maximum rate of 40 per cent. Further reductions both in terms of tariff rates and the number of tariff bands are expected during 2001. Controls over retail prices and interest rates, which were prevalent during the centralized planning system, have been eliminated. Furthermore, fundamental reforms have been implemented in the financial sector and in monetary policy. Private sector financial institutions are now permitted to operate, although the financial sector is still closed to foreign investors. There are now six private banks and five private insurance companies in the country.

The reforms introduced in exchange rate policy have also been decisive with positive outcomes are evident in the supply of essential raw materials, spare parts, replacement machinery and critical inputs to the agricultural sector such as fertilizers. Since 1992, Ethiopia has cautiously devalued its currency (the Birr) and has moved toward a market determined exchange rate system through the use of periodic foreign exchange auction. Judging by the low rate in the parallel market for foreign exchange, in spite of shortages in the supply of foreign exchange caused by the regional conflict, it seems that the exchange rate policy reforms implemented to date have been successful. However, further reforms are required to ensure that the policy remains effective and that the Birr eventually becomes convertible. Convertibility of the local currency is an important component of the investment promotion policy.

In line with market-oriented economic policy, the investment regime has also been liberalized through a series of Government proclamations. Since 1992, the investment code has been revised twice to ensure a wider coverage of the sectors and activities that foreign investors are allowed to participate in. The latest revision has broadened the sectoral coverage to include telecommunications and power sectors. The Ethiopian Investment Authority (EIA), which is an autonomous Government body, serves as a one-stop-shop for the promotion of foreign investment. After a slow start, the Ethiopian Privatization Agency (EPA) has also begun to promote Ethiopia as a location for FDI. Many of the regulatory and policy constraints that bedevilled the economy in the past have been removed and the investment regime is now relatively open. However, further

reforms are needed in regard to the minimum size investment requirements for foreign participation in joint ventures, the activities that are still closed to foreign investment and the remaining administrative and procedural obstacles to investment, which can raise the cost of doing business in Ethiopia.

To promote exports, the Government has also initiated a number of measures including the establishment of an export promotion agency, the introduction of a duty drawback scheme and the elimination of foreign exchange surrender requirements. Exporters can now retain up to ten per cent of their foreign exchange receipts in foreign currency deposit accounts and sell the rest to any local bank or foreign exchange bureau at freely negotiated rates over an extended conversion period of four weeks. In addition, foreign investors in the export sector are allowed to buy foreign exchange for remittances. These incentives as well as the efforts by the Government, with the assistance of bilateral and multilateral donors, to upgrade the domestic skill base and infrastructure capacity are aimed at stimulating export expansion and creating an environment conducive to export oriented FDI.

B. Policy Coordination in a Federal System

Federal systems have both advantages and disadvantages relative to centralized Government structures in the development of investment and innovation strategies. Local Governments, for example, are ideally situated to identify opportunities for the development of spatial clusters of activities and the complementary policies and supporting institutions that may be needed to strengthen them. They are also well positioned to build channels for dialogue with local actors that facilitate the emergence of a consensus on the strategies and steps needed to develop the local economy.

Within the context of a federal system, however, coordination is always a problem. Competition among local Government authorities for domestic resources can lead to a duplication rather than a complementary work process. The timing and sequencing of policies and the building of infrastructure that strengthens investment potential and opportunities for innovation through networking and interaction across regions, requires the development of structures for consensus-building among regions and between regions and the federal Government. Within federal systems, there is also a tendency for regional authorities to engage in bidding wars for foreign investment. A lack of coherence in investment promotion strategy significantly reduces the contribution that foreign investment can make both to Government revenues and to the strengthening of local innovative capability. Here, too, structures for dialogue and coordination must be put in place.

Moreover, within all federal systems, there are grey areas with respect to the division of powers between federal and regional governments that go beyond the role of adjudication assigned by law. Constitutions, for example, do not specify the rules and procedures for arriving at coordinated policies within a federal structure. Interest rates and exchange rates, both form part of the macroeconomic policy-making prerogatives of the federal Government in Ethiopia. Yet both serve to shape the parameters within which enterprises make decisions with regard to investment and innovation, which has a bearing on convergence or divergence in regional development. Economic policies that fall within the realm of macro-policy environment, such as those which fix tariffs and

determine investment codes create the incentives, which shape the amount and distribution of foreign investment. This, too, affects possibilities for development across regions.

Federal structures must thus be flexible and oriented toward building trust and a sense of partnership. Clarity and legitimacy of rules and procedures and a commitment to open bargaining between all parties are a prerequisite to overcoming the problem of excessive politicization of the policy-making process. They are an essential element in building a consensus among regional Governments on investment policy and ensuring effective coordination in resource allocation, policy sequencing and timing across regions.

Federalism in Ethiopia, as elsewhere, will necessarily involve a continuous balancing of tension as part of the attempt to create unity and integration without imposition from the centre. This will likely involve continuous adjustment in the establishment, distribution, location and funding of national institutions.

C. The Need for Core Competence at the Regional Level

Policy-making and management at the Government level is centralized in Addis Ababa. In the new dispensation, national policy in all sectors stress the autonomy of decentralized activities with a pledge to strengthen the regional, zonal and district/woredas levels of Government. In the main, the Central Government formulates overall policies and strategies and guides as much as possible, the implementation of national programmes. Regional state Governments are given considerable authority, and are responsible for implementation. For example, in the 1997/1998 fiscal year, about 80 per cent of education expenditure and approximately 90 per cent of health expenditures were allocated regional budgets. However, field studies carried out for this report show that most of the regional states require considerable injection of human and material resources to develop viable investment, both domestic and foreign, opportunities at regional levels (this is corroborated by the extremely low indices of practically all socio-economic development indicators). It is important to note that decentralization in Ethiopia has entailed a high degree of devolution of power, containing elements of democratization, fiscal and administrative decentralization. This then means new structures at state and woreda levels which could be costly.

There are five dynamic conditions, that must all be simultaneously present and reinforcing one another, for viable investment opportunities and technological development within Ethiopia's regional system. These conditions are:

- (i) Human capital (administrative and technical) in sufficient quality and quantity;
- (ii) Adequate financial resources to develop institutional capacity;
- (iii) Commensurate political and administrative powers sufficient to influence development programming;
- (iv) Physical and technological infrastructure;
- (v) Horizontal linkages between key institutions dealing with investment, technology and learning.

D. Comparative International Position of the Ethiopian Economy

Chart 1 provides the results of a recent business survey on policy and other changes taking place in African countries and whether, from the business community perspective, the changes are positive.⁵ The index, therefore, measures the level of "optimism" and confidence on the direction of change and the improvements that are introduced by different African countries. It is shown that out of 20 African countries included in the "optimism index", Ethiopia ranks among the top five countries, after Mozambique, United Republic of Tanzania, Uganda and Egypt. This indicates an overwhelming vote of confidence in the reforms the Government has implemented since 1991. However, although this is encouraging news for Ethiopia, it should be noted that, the optimism index is only an expression of the country's positive image and its prospects by potential investors. It may not necessarily mean that large scale investments will follow as a result. To maintain the high level of confidence and to ensure that it results in investment inflow, continuous improvements in the investment climate and domestic supply capability is required. It calls, above all, for a stable macro-economic environment, a pro-active investment promotion strategy, an industrial policy that stimulates learning, technological upgrading and innovation in the productive sectors and a dedicated leadership committed to well-functioning markets and with a clear vision for the immediate and long-term future.

As shown in Chart 2, accompanying optimism is a realistic assessment of Ethiopia's competitive position compared to other countries in the region. The "competitiveness index", which shows the degree of competitiveness of 23 African countries⁶, indicates that Ethiopia is among the least competitive countries on the continent. It ranks 17 and scores less than other East African countries such as Kenya, Uganda and the United Republic of Tanzania. It is interesting to note that the top performers, Mauritius, Tunisia, Botswana and Morocco, are countries that have invested heavily in infrastructure development, diversified their export base through domestic supply capability-building, created an environment favourable to a sustained inflow of FDI and managed over time private-sector led development under stable economic and political conditions.⁷ The lesson for Ethiopia is that moving up in the competitiveness index may require among other things the strengthening of domestic supply capability through technological upgrading, increased investment (domestic and foreign) and infrastructure development.

Tables I.2, I. 3 and I.4 provide selected indicators for inter-country comparisons. From these, it is possible to identify some of the strengths and weaknesses of the Ethiopian economy as well as its comparative advantage with other countries of the region competing to attract foreign investment. More importantly, they point to some areas that future policy attention should focus in order to build a national economic environment which is technologically dynamic and attractive to investment, both domestic and foreign.

⁵ The chart is obtained from The Africa Competitiveness Report 1998, prepared by the World Economic Forum.

⁶ The competitiveness index is measured on the basis of a set of criteria which includes openness, Government, finance, labour, infrastructure and institutions. Although, the determinants of competitiveness nowadays are more complex than implied here, for the sake of comparison, the index serves a useful purpose.

⁷ For explanations of the differences in the performance of the countries, see Sachs, J and G. Stone, "Executive Summary", The Africa Competitiveness Report, 1998, World Economic Forum, Geneva, Switzerland.

Market size: As shown in table 2, nearly 10 per cent of Sub-Saharan Africa's population live in Ethiopia which makes it the second most populous country in that region. In addition, Ethiopia is a member of the Common Market for Eastern and Southern African Countries (COMESA), which is a regional trading group incorporating 20 countries. A large domestic or regional market, other things being equal, is attractive for local investment. It offers easy entry opportunity as well as the opportunity to understand market conditions and is also attractive to foreign investment. Given the fact that, at present, modern sector goods and services are accessible to only one-third of the Ethiopian population, the potential for industrial expansion through investment and acquisition of technology even within the country is great.

Natural resources: Despite Ethiopia's wealth in natural resources, their extraction and development, especially mineral resources, remain unexploited. The mining sector currently contributes to less than 5 per cent of industrial output. Known reserves of metallic and industrial minerals include gold, phosphates, nickel, copper, zinc, platinum and soda ash. Ethiopia also has the largest livestock population in Africa and the tenth largest in the world. As shown in Chapter IV, recent policies have encouraged the development of the leather sector. Principal products of this sector being semi-processed skins, crust hides, wet blue hides, leather boots and footwear. Great potential exists for turning this industry into a competitive and an attractive sector for FDI. Although Ethiopia also has a large water resource capacity, which could be used for large scale irrigation and power generation, it has yet to sufficiently exploit it, due partly to geo-political factors. Currently, less than 25 per cent of the arable land is under cultivation and only 2 per cent of the country's substantial hydro-electric potential is being utilized.

Agriculture: Ethiopia is an agricultural based economy. It generates over one-half (56 per cent) of the country's GDP — more than double the average for Sub-Saharan Africa — and over 80 per cent of export earnings. Production is predominantly in the hands of small farmers working individual smallholdings mainly for household consumption. While smallholdings can be efficient and an important source of surplus, this sector remains underdeveloped and in need of more policy attention. Currently, Ethiopia's agriculture is characterized by its low level of fertilizer application, one of the lowest in Africa, and its low level of mechanization. As explained in Chapter 3, an integrated policy approach may be required to make this sector receptive to technological adaptation and diffusion and attractive to investment, both foreign and domestic. A key structural weakness in the Ethiopian economy is its dependence on a single agricultural product, coffee, for exports and foreign exchange earnings. Coffee accounted for some two-thirds of total export earnings over the past two decades. Volatile international coffee prices result in erratic patterns of economic growth as demonstrated by sharp changes in the annual rate of GDP growth (table 1). Manufacturing exports accounted for less than 1 per cent of total exports. Export diversification, which is now a major policy priority, will help remedy the imbalance in the export structure.

Technological development: Ethiopia's general level of technological capability is low and lags well behind other countries in the region (table 2). It has one of the lowest levels of primary and secondary school enrolment ratios and expenditures on education. National average for primary education of school age children is 30.1 per cent and for secondary 8.1 percent. In four regional states, Afar, Somali, Amhara, and Oromiya the figures fall below the national averages. The average gross enrolment for Sub-Saharan Africa (SSA) is 25 per cent for secondary schools or three times

Ethiopia's national average. Human capital is the sum total of the skills level of a country's entire workforce including managers and administrators. This is underpinned by a strong foundation in formal education from the primary to the tertiary level. However, Ethiopia's low level of primary school enrolment rate would still leave a lot of the school-aged population out of the educational system. At this rate, the number of school children, in school, by the year 2020 is estimated to be about 7.6 million out of the projected population of 97.9 million, a mere 7.7 per cent of the population. This is approximately 20 per cent of the 0-14 age group for that year.

Reliable science and technology indicators for African countries are not easily available but the limited information obtained (table 2) suggests that access to and application of technology, especially information and communications technologies are still at the rudimentary stages. In Ethiopia, only 3 per 1,000 persons have access to main telephone lines and 4 per 1,000 persons to television sets. The ratio for computers is even less. The waiting time for main telephone line connections has improved in recent years going down from more than 10 years, prior to 1995, to 5 years by the end of 1999. Internet connectivity was 0.01 per 10,000 by the end of 1998. As Ethiopia's integration into the global economic system intensifies with liberalization and trade expansion, it will become increasingly necessary to attract not only investment but also the technology and knowledge needed to build a competitive enterprise sector and to sustain the attractiveness of the economy for further investment. This will require increased public investment in communications infrastructure, but also active private sector involvement, including foreign investment, in the development of the communications sector.

Physical infrastructure: Another weak link in Ethiopia's economic system that has direct implications for investment prospects is the poor state of physical infrastructure. In the area of energy consumption, for example, traditional fuel still accounts for 91 per cent of total consumption (table 2). Electricity, one of the essential requirements for industrialization, is underdeveloped in Ethiopia. It has the lowest kilowatt per hour (KWH) per capital consumption in the region. Only 5 per cent of the population has access to electricity.

In terms of transport, Ethiopia has a reputable national airline which provides efficient air links nationally and with many countries around the world. The airline and all its technical and training activities provide an opportunity for building Addis Ababa as a regional hub for air transport. Currently, there are plans to expand the Addis Ababa airport and improve its facilities. This provides a unique opportunity for considering the option of turning the country into an important regional centre for air transport. In contrast to air transport, Ethiopia has a limited railway service, the lowest road densities in Africa with only 15 per cent of the national road network paved. Large portions of rural areas are still inaccessible by road. As a landlocked country, the main external trade route at present is through Djibuti. Improvement in physical infrastructure, in particular the transport system and energy, is, therefore, one of the major challenges facing the Government. Indeed, in recognition of this problem, the Government has singled out these two areas as top priorities for public investment.

Overall Assessment

In the last decade, Ethiopia has worked tirelessly to transform its economy from a closed, highly regulated, centrally planned and dominated public sector to an open, deregulated and market-based economy. To a certain extent, the reform programme has seen successful economic growth rates, foreign investment, and significantly higher volume of exports and export earnings. Unfortunately, some of these advances have been negatively affected by the recent conflict with Eritrea, despite Government efforts to shelter the economy from the impact of the war. Although the immediate impact was felt mainly in the conflict area, for example, in terms of the displacement of over half a million people, it did have wider implications. There was a slow-down in private sector investment and donors significantly reduced and in some cases withdrew, their support. Now that peace has prevailed again, additional efforts are required in investment promotion and in the development of local technological capability and infrastructure, both physical and institutional. In designing a strategy for investment promotion, the Government needs to map out a clear perspective of the national context, in particular the policy and regulatory environment and the strengths and weaknesses of the economy.

Table No.I.1
INTER-COUNTRY COMPARISON: SELECTED INDICATORS

	Ethiopia	Kenya	Uganda	United Republic of Tanzania	Egypt	Tunisia	Morocco	Sub-Saharan Africa
Population (millions) 1997	60	28	20	31	60	9	28	614
GNP Per capita 1997	110	330	320	210	1,180	2,090	1,250	500
GDP (millions \$) 1997	9.85	9,899	6,555	6,707*	75,482	19,069	33,258	320,252
Agriculture % of GDP 1998	56	29	44	48	16	14	20	25
Manufacturing, % of GDP 1997	7	11	8	7	25	18	17	16
Total Exports of good and services (millions \$, 1996)	783	3,027	726	1,372	15,245	8,151	9,246	83,985
Total Exports of good and services (as % of GDP, 1997)	16	32	11	22	21	42	25	28
Non-manufacturing goods (as % of total exports)	89 (1995)	73.6 (1996)	99.3 (1992)	82.5 (1992)	68.4 (1996)	20.2 (1996)	49.7 (1996)	
FDI (inflows, millions \$, 1997**)	15	40	250	250	834	360	500	

* Data cover mainland United Republic of Tanzania only

** Estimates obtained from WIR

Source: The World Bank, World Development Report 1989/1999
United Nations, World Investment Report, 1998
United Nations, Handbook of International Trade and Development Statistics, 1996/1997

Table No.I.2

NATIONAL LEVEL TECHNOLOGY CAPABILITY INDICATORS

	Ethiopia	Kenya	Uganda	United Republic of Tanzania	Egypt	Tunisia	Morocco	Sub-Saharan Africa
S & T Indicators								
Tertiary natural and applied science enrolment (as % of total tertiary 1995)	36	-----	13	39	15	24	29	
Tertiary engineering enrolment (% 20-24 age group, 1990-1995*)	0.1	-----	0.1	0.1	1.0	0.8	0.1	-----
Public expenditure on higher education (as % of all levels, 1990-1995)	11	14	-----	17	36	19	16	
Access to Information Technology								
Radio (per 1,000 people, 1996)	206	96 (1995)	123	398	312 (1995)	176	226 (1995)	-----
TV (per 1,000 people, 1996)	4	19	26	16	126	156	145	43
Main telephone lines (per 1,000 people)	3	8	2	3	50	64	45	14
Waiting time for main telephone lines (Years, (1996)	>10	4.5	0.7	>10	5.0	1,5	0.3	5.4
Personal computers (per 1,000 people, 1996)	-----	1.6	0.5	-----	5.8	6.7	1.7	-----
Internet hosts (10,000 people, 1997)	0.01	0.14	0.01	0.01	0.29	0.05	0.51	0.07

	Ethiopia	Kenya	Uganda	United Republic of Tanzania	Egypt	Tunisia	Morocco	Sub-Saharan Africa
Human Capital								
Primary schools gross enrolment ratio % (1995)	31	85	73	67	100	116	83	
Pupil/teacher ratio	38 (1995/1996)	30 (1995)	35 (1995)	36 (1996)	23 (1996/1997)	24 (1996/1997)	28 (1996/1997)	
Secondary gross enrolment ratio % (1995)	11	24	12	5	74	61	39	
Tertiary natural and applied science enrolment (as % of total tertiary, 1995)	36	-----	13	39	15	24	29	
Public expenditure on education as % of total government expenditure (1993-1995)	13.0	16.1	15.0	11.4	13.8	17.4	22.6	-----
Infrastructure								
Electricity consumption KWH per capita (1995)	22	144	34	58	787	848	480	
Traditional fuel consumption (as % of total consumption, 1995)	91	78	90	91	4	14	5	
Commercial energy use (oil equivalents per capita Kg, 1994)	22	110	23	34	600	595	327	
Paved road % of total (1996)	15	14	-----	4	78	79	50	17

* Data are for the most recent year available

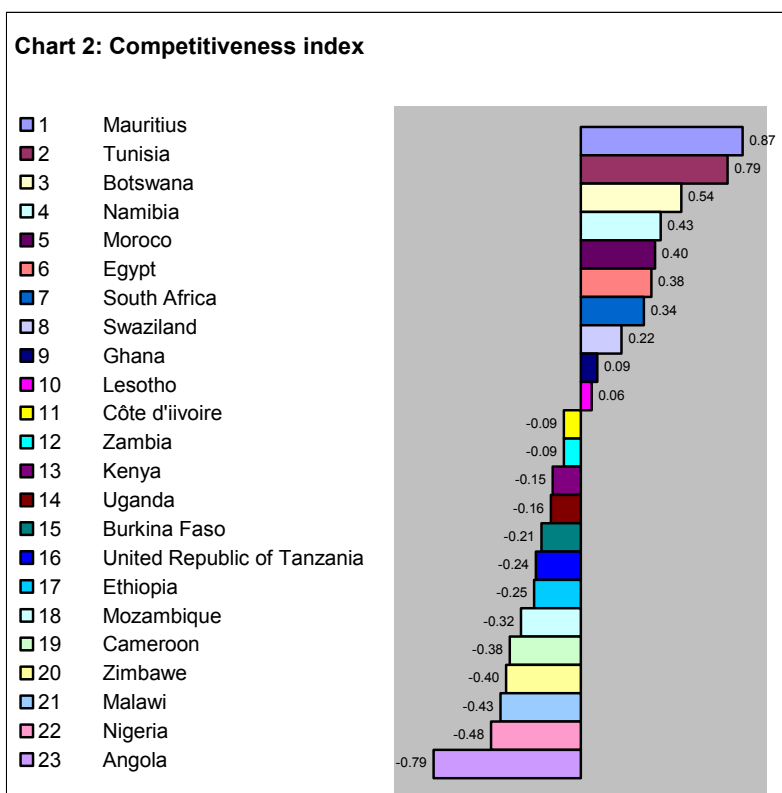
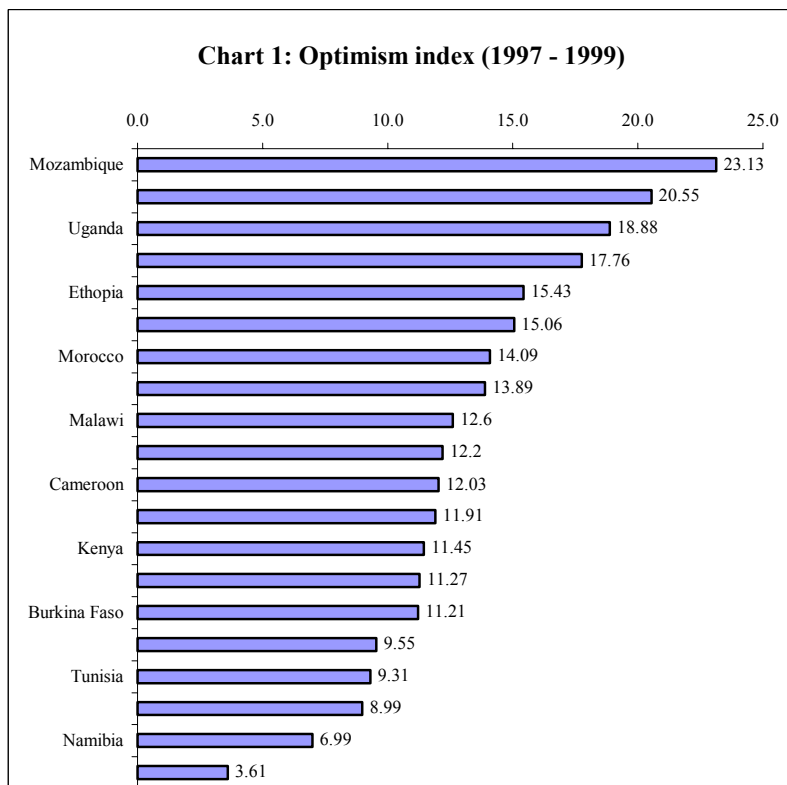
Source: African Telecommunication Indicators 1998
Human Development Report 1998
World Development Report 1998/1999

Table No. I.3

FACTORS THAT CONTRIBUTE TO ETHIOPIA'S COMPETITIVENESS

	Strengths	Weaknesses
Political environment	<ul style="list-style-type: none"> < Democratic system of government < The seat of many multilateral organizations, including the OAU and ECA < Serious Government with the determination to achieve private sector led rapid economic growth < Membership of the Lomé Convention 	<ul style="list-style-type: none"> < Regional instability
Macro-economic environment	<ul style="list-style-type: none"> < Consistent market reforms since 1991 < Fiscal stability and low inflation < A strong growth record in recent year < Liberalization of trade, financial and monetary policy < Strong donors support, including multilateral agencies such as the IMRF 	<ul style="list-style-type: none"> < Low domestic saving < Recent growth dependent on weather conditions < Bottlenecks in the implementation of policies due to weak administration and institutional structure
Market potential	<ul style="list-style-type: none"> < The second most populous country in Sub-Saharan Africa < Member of a regional trading block, COMESA 	<ul style="list-style-type: none"> < Low purchasing power (with GDP per capita of \$110, one of lowest in the world)
Natural resources	<ul style="list-style-type: none"> < Abundant agricultural resources with potential irrigated land of about 3.5 million hectares < The largest cattle population in Africa and tenth largest in the world 	<ul style="list-style-type: none"> < Only 4 per cent of potentially irrigated land developed

	<ul style="list-style-type: none"> < Nine major river basins and diverse mineral resources such as gold, nickel, potash, soda ash, platinum and marble. 	
Human resource development	<ul style="list-style-type: none"> < Relatively young and disciplined labour force < Competitive wage structure (minimum wage \$15 and graduate salaries range from \$75 to \$100 per month) 	<ul style="list-style-type: none"> < High level of illiteracy < Shortage of skilled technical personnel
Infrastructure	<ul style="list-style-type: none"> < Reputable national airline providing efficient air links with many countries around the world < Privatization programmes in the energy and telecommunication industries 	<ul style="list-style-type: none"> < The lowest road densities in Africa < Limited railway service < The lowest levels of energy consumption in the world (only 5% of the population has access to electricity) < Limited access to telephone services
Investment environment	<ul style="list-style-type: none"> < A liberal and attractive investment climate < Opportunities for FDI in many areas including agro-business, manufacturing, tourism, infrastructure (in particular energy and telecommunications) < An artesian tradition and proven record of dynamic entrepreneurship 	<ul style="list-style-type: none"> < The cost of doing business is still high due to remaining bureaucratic procedures < Lack of clearly defined instrument promotion strategy



Source: The Africa Competitiveness Report 1998.

CHAPTER II

Investment Policy and Promotion

This chapter focuses on investment policy and promotion and specifically on potential contributions of foreign direct investment (FDI) to Ethiopia's economic, social and regional development. The review of the current FDI policy framework and priorities is undertaken within the context of the major changes underway in international private capital flows and especially in the structure and strategic perspectives of the multinational corporations that decide the destination of direct investment. Understanding and positively responding to these global shifts and trends is an important policy priority for Ethiopia during the decade ahead. The following section reviews the flow of FDI into Ethiopia since the opening up of the country to international investment in early 1991. This relatively short period has met with a degree of success in attracting new direct investors and joint ventures. The effectiveness of the investment promotion activities undertaken by the Ethiopian Investment Authority (EIA) as well as the current and future challenges in investment promotion is then assessed. Finally, the priorities to be pursued by EIA and the Government over the next decade will be identified.

A. FDI Inflow to Ethiopia: 1991-1999

FDI is only one component of new capital formation in the Ethiopian economy. Ideally, its magnitude and contributions should be assessed in relation to total capital formation including federal and regional Government capital expenditure, investment funds and services in kind provided through multilateral and bilateral development assistance, and capital expenditure by domestic and personal sectors. Unfortunately, the data needed to conduct a detailed assessment is not available. Therefore, the following comments relate purely to domestic and foreign investment (including joint-ventures) that were made in commercial projects as identified and reported by the EIA. It is, however, worth noting that in 1999, private investment in Ethiopia accounted for over 60 per cent of gross domestic fixed investment. Moreover, it is believed that domestic and foreign private investment continues to form the majority of real capital investment.

(i) *The level and value of new investment projects*

The number, scale and origin of new capital investment projects as reported by the EIA are shown in table II.1, which covers the post 1992/1993 period. There may be an element of under-reporting of investment projects during the earlier years. It is also possible that new project expenditure by existing FDI in Ethiopia has not been fully recorded. The figures are thus best seen as major new capital investment projects and representing genuinely important additions to the nation's capital stock.

The main points to note in relation to the number, value and scale of new investment projects which have commenced operation in Ethiopia (as distinct from being approved or in process of implementation) are that:

- ◆ Only 19 new and expansion FDI projects have become operational in Ethiopia over the post-1992/1997 period, compared to over 1,160 domestically funded projects. Nevertheless, there has been a distinct growth recently in operational FDI projects as approved projects move into operation;
- ◆ As expected, the average value of FDI projects at EB 169 million is much bigger than domestic projects which have averaged EB 4.8 million to date. This varies a little by sector and region. Foreign capital and joint-ventures represent the main source of major industrial ventures;
- ◆ The recent growth in FDI resulted in a situation where, for the first eight months of 1998, overseas investment accounted for nearly 60 per cent of the value of operational project investment in Ethiopia. This level will probably continue given the recent pattern of project approvals.

Although domestic investments are still the major sources of capital formation in the country accounting for about 62 per cent of total capital invested, FDI has begun to make headway implying that the role of EIA in supporting and servicing international investors will play an increasingly important role in the future.

(ii) Regional and sectoral distribution of investment benefits

There are a number of features of domestic and international investment that are important to future investment policy and promotion in terms of the spatial and sectoral priorities of investors (summarized in table II.2). Although the results have been aggregated for presentation purposes, the EIA investment project statistics are reported in detail for each of the regions and by industry segment, enabling an effective monitoring of new operational projects.

The main points of the regional and sectoral distribution of domestic and foreign investment in Ethiopia over the recent past and relevant to policy priorities for the future are that:

- ◆ Domestic and foreign investments since 1992 have been unevenly distributed among the various regions. As shown in table II.2, over 50 per cent of total domestic investment and nearly 98 per cent of foreign investments have been directed at three regions, namely Addis Ababa, Amhara and Oromia region;
- ◆ Foreign investment appears to be concentrating largely within Addis Ababa and the Amhara region. In terms of the overall value of FDI (including joint-ventures) 54 per cent went to Addis Ababa, 43.5 per cent to Amhara and the remaining 2.5 per cent to other regions. Overseas investment in operational projects is not as concentrated in the Capital as widely supposed;
- ◆ Domestic investment projects are concentrated in five regions namely, Addis Ababa, Oromia, Tigray, Amhara and Southern Nations, Nationalities and Peoples (SNNP) accounting for 21 per cent, 22.8 per cent, 36.7 per cent, 7.9 per cent and 6.8 per cent respectively.
- ◆ It is, however, important to note that overseas capital has represented 77 per cent of total investment capital in Amhara and nearly 60 per cent of new capital project funding in Addis Ababa but a mere 2.6 per cent in Oromia;

There is, therefore, a tendency for overseas investors to focus on a relatively limited number of locations within Ethiopia. This has implications for future promotion priorities and investment incentives.

The pattern of foreign investment in terms of broad economic sectors and industrial segments is more balanced than its spatial distribution. As can be seen from table II.2, the main divergence of foreign investment is that it is relatively higher in primary sector projects (42.5 per cent) and comparatively lower in terms of secondary sector manufacturing ventures (26.8 per cent) when set against the 36.3 per cent of overall investment capital provided by international investors.

To date, operational FDI projects have been concentrated in a few industrial sectors: two projects in each of the food crops, farming, beverages and chemical product sectors; four construction projects; three projects in the metal fabrication sectors; and the remaining six projects dispersed across a range of sectors. The single largest project (at EB 1,186 million) is in the hotel sector (the Sheraton hotel in Addis Ababa). This accounts for 37 per cent of the total post 1992-1993 value of investment in Ethiopia. This domination of FDI by a single project (albeit one with major economic development linkage potential) is perhaps unique in the larger low-income countries. The importance of flagship FDI projects is further considered below.

(iii) The origin of FDI in Ethiopia

Estimates of the value of the stock of FDI in Ethiopia in mid-1975, when the previous regime appropriated most foreign enterprises, are not available. For the post 1992/1993 period, however, the EIA maintained information on the country of origin of foreign investors (both corporate and private) invest in new wholly-owned or joint-venture projects. The figures produced by the EIA, which are summarized in table II.3, are more complex than they initially appear, as around 20 per cent of both wholly-owned and joint-venture projects involve investors from two (occasionally three) home countries coming together to make investments. Therefore, the data, as recorded may thus not be fully accurate in terms of allocating capital flows between home countries. The EIAs review of investment applications and direct contact with investors suggest that a large proportion of these multi-nation FDI consortia are expatriate Ethiopians (sometimes from a single family) initiating steps to invest in new projects or rebuild long-established Ethiopian businesses. The investment figures presented in table II.3 include the geographical origin of FDI projects (wholly-owned and joint-venture) approved by the EIA. Caution is necessary in interpreting this data as approval may not necessarily mean the projects are operational. Nevertheless, they indicate the home country origins of new post-1992 capital stock and its main features.

- ◆ Private investors from the Middle East region have generated one-third of new FDI projects and have contributed two-thirds of the new capital associated with these projects. Saudi Arabia is by far the largest source of investment with EB 4,981 million of committed capital to date, or 60 per cent of the overall FDI approved. It is believed that MIDROC Ethiopia plc represents a significant share of these Saudi Arabian investments;
- ◆ The second most important source of FDI to Ethiopia over the period 1992/1993 to 1997/1998 has been the European Union, which generated nearly 30 per cent of the projects but only 15 per cent of the new capital approved. Within the European

Union, private capital flows from most major European Union member States were represented, though no single State had a dominant role. Multi-state projects were present suggesting an involvement by expatriate Ethiopians;

- ◆ The third largest source of FDI has been the Africa region which generated 17 per cent of FDI projects approved by the EIA, but a smaller proportion (11 per cent) of the capital value. These projects were comparatively small and again multi-nation projects (12 of which involved the United Kingdom) suggesting the involvement of Ethiopians residing abroad.

The remaining 8 per cent of FDI capital value had a variety of origins including North America, Asia (predominantly India) and European and East European Countries.

The important implications of this revealed pattern of recent FDI capital flows to Ethiopia are that the Middle Eastern countries, the adjacent African nations and the corporations in the European Union are appropriate FDI targets. However, in terms of transfer of technology, benefits arising from European and North American corporate investments will probably be more important. In addition, existing multi national corporation (MNC) operations in Ethiopia, especially in fuel distribution (that is, Shell, Texaco, Agip, etc), truck assembly (NECO) and food products form another important investment promotion priority where follow-up investment projects may well be possible. This again emphasizes the need for a detailed understanding of the business needs and priorities of international corporations.

B. The FDI Regulatory Framework

The present regulatory regime governing FDI in Ethiopia is based on a series of Investment Proclamations issued between 1996 and 1998, principally Proclamations 7/1996, 37/1996, 35/1998, 36/1998 and 116/1998. In combination, these establish the economic sectors open to FDI; the financial limits and requirements for FDIs; the monitoring and reporting requirements; and the financial incentives that are available. It is worth briefly summarizing the main features of the present regulatory regime in each of the above areas.

(i) *Economic sectors open to FDI*

Foreign investors are encouraged to invest in all economic sectors, except those currently reserved for domestic private and state investment, with the domestic private investor category including foreign nationals who are permanent residents in Ethiopia. There is a continuous review of the sectors closed to FDI. Indeed, the amendments to the Investment Code made in June 1998 have opened up energy generation and telecommunication services to the private sector, both foreign and domestic. Under this Proclamation, the generation of electricity from hydro-power is allowed for both foreign and domestic investors without any limitation on generation capacity. In addition, private investors, both foreign and domestic, are permitted to invest, in partnership with the Government, in defense industries and telecommunication services.

Sectors reserved for Government at the end of 1999 included air transport (where passenger seating exceeds 20 or cargo exceeds 2.7 tonnes); rail transport services; and postal services and telecommunications (excluding courier services). There are plans to reduce these reserved areas.

However, telecommunications (including Internet access) is seen as remaining State owned in the immediate future. In general, therefore, although the FDI regulatory framework in Ethiopia is more open now than during the 1980s, it is still highly restrictive compared to many other developing countries, including those in the region.

Sectors reserved for domestic investors as of mid 1999 included banking and insurance; small-scale electricity generation except from hydro-power; small scale air transportation services; radio and television broadcasting; retail trade and product brokerage; wholesale trade and distribution (excluding fuel and the domestic sale of locally produced goods from FDI plants); importing; exports of raw coffee, oil seeds, pulses, hides & skins, and live sheep, goats and cattle; construction companies (excluding grade one contractors) and building maintenance; tanning hides and skins up to crust level; hotels other than star designated; motels, tearooms, coffee shops, bars, night clubs and restaurants excluding international and specialized restaurants; tour and travel operators; car-hire, taxis and commercial road and water transport; grain mills and domestic batteries; barber & beauty shops; goldsmiths; non-export tailoring; saw milling and non-export forest products; and the printing sector. This large exclusion of FDI from the Ethiopian economy is designed to encourage indigenous entrepreneurship and the domestic private sector.

The Government has indicated that it will continue to review these exclusions, with the intention of reducing sectors closed to FDI to the minimum level. Whilst many of the sectors currently closed to FDI are not those where international corporations normally operate, it is important to recognize that such restrictions (however well-intended) may not give a positive welcoming image to potential foreign investors. Reserved sectors are not a feature of most FDI home countries. Furthermore, in some of the reserved sectors, in particular air transport, travel operations and certain services, the financial and trading skills of FDI may be important positive influence and stimulus on domestic investors.

(ii) *Ownership limitations and requirements*

Under Proclamation 37/1996 a minimum investment sum is required for both wholly-owned operations and joint-ventures with Ethiopian companies or individuals. The value of the investment must be in either cash or in-kind.

For wholly owned FDI into the open sectors, an initial investment of \$500,000 is required and in the case of engineering or technical consultancy an initial investment of US \$100,000.

For joint-ventures with Ethiopian investors, the foreign partner is expected to contribute \$300,000, with this minimum equity requirement representing either cash or the value of the capital equipment imported to establish the venture. There is also a further requirement stipulating that Ethiopian partners must hold in excess of 27 per cent of the equity in each joint-venture.

If the Government wishes to give priority to attracting larger FDI projects, it may be right to have a threshold level to ration the presently limited FDI promotional and management capability in EIA and the regional promotion agencies. However, a minimum investment requirement is not a common feature of investment regulatory regimes of most host countries that are competing to attract FDI.

Apart from these minimum capitalization conditions, the investment code does not require FDI to meet specific performance goals or guidelines through their operations. There are no requirements in terms of export levels, minimization of foreign trade balances, foreign exchange restrictions for imports, minimum local content levels in manufactured goods, or employment limits on expatriate staff. Once an investment project is established and operational, it is clearly left to a company's managers to make all key decisions without Government authorization or interference.

(iii) Monitoring and reporting requirements

There is currently a requirement for both FDI and domestic investors, under Proclamation 37/1996, to submit progress reports to EIA on the status of projects every six months once the original investment permit has been issued. The purpose of this is for EIA to be regularly informed on progress and also to identify (as early as possible) emerging problems in order that EIA or other Government agencies can help resolve the problem or constraint. Staff in the Project Evaluation, Follow-Up and Consultancy Service Departments of EIA also undertake (when resources and workloads allow) monitoring of major or sensitive FDI projects to assess progress against the original plan and intentions submitted to EIA to gain their permit. Should variations from the original proposals occur, the EIA seeks to understand why, and if necessary will help investors bring it back on track where the original plans have not been rendered inappropriate through external economic or market changes.

There is some concern amongst foreign investors already established in Ethiopia (on the basis of limited discussions with senior executives) that such monitoring tends to be undertaken in a relatively mechanistic manner. Although EIA managers are adept at helping resolve inter-agency conflicts (for example, land availability), they have little understanding of business factors causing divergence from original plan intentions and no real capability to advise on how to resolve these. This is a common problem in many countries, including developed countries where FDI promotion staff often have very limited advisory skills in business development. However, there will normally be a local advisory capability that can be brought in to assist investors. Although it is difficult to determine whether such limitations are hampering foreign investment plans in Ethiopia, it is, nevertheless, advisable that the EIA improves its monitoring capacity.

(iv) Fiscal incentives for FDI

Since 1991, Ethiopia has introduced a combination of investment guarantees and investment incentive measures designed to provide a supportive and reassuring business environment for potential foreign investors. These are broadly in line with the guarantees and incentives of competitor nations and are being reviewed by Government on a continuing basis.

- ◆ Investment incentives for FDIs are significant and include 100 per cent exemption from customs duties and import taxes on all capital equipment and up to 15 per cent on spare parts; exemption from export taxes (except for coffee); income tax holidays varying from one to five years (depending on the sector and region within Ethiopia); tax deductible R&D expenditure; no taxes on the remittance of capital; the carrying

forward of initial operating losses; and investor choice in depreciation models. These incentives apply to eligible sectors open to FDI;

- ◆ Investment guarantees for FDIs include full repatriation of capital and profits encompassing not only profits, dividends and interest payments on foreign loans but also on asset sale proceeds and technology transfer payments. There is also a guarantee against expropriation, except in major cases of public interest when full market value compensation will be paid promptly⁸.

These guarantees and incentives are clearly presented by EIA and the Government in current promotional material. The documentation and monitoring of these by EIA also appears to be efficient. There has as yet been a review on the relative attractiveness and benefits of the present guarantees and incentive of programmes with recent foreign investors, nor any comparative benchmarking of the Ethiopian incentive package with those in competitor nations. The perception of both the Government and existing foreign executives is that the prime investment promotion challenge for Ethiopia is not in relation to the FDI incentive package. Rather, it is in relation to the external perceptions of Ethiopia as documented by the prevailing international media picture, in particular following the recent regional conflict.

The investment incentives offered to FDIs locating in Ethiopia are designed primarily to be effective through the reduction of corporate taxes and import duties, including the carry forward of initial operating losses to offset against subsequent profits. Whilst this is standard for emerging economies, it must be noted that Southern European, Latin American and Asian countries seeking inward investment often include investment grants and other financial support usually tied to employment, export and capital commitment goals. Such grants and/or loans may be reinforced by the provision of sites and property with rent-free periods running up to five years and by the State picking up part or all of the initial vocational skills training costs for locally-recruited employees.

The financial constraints facing Ethiopia makes such direct financial contributions to the costs of new capital investment by FDIs almost impossible, but EIA and other agencies should be aware that the corporate views of the main Northern Hemisphere FDI home countries will be coloured by their experience as inward investors elsewhere. As Ethiopia aspires to attract greenfield investments by corporations which have no previous knowledge of the country, EIA staff must be able to positively respond to possible FDI concerns about incentives other than tax holidays and free import duties. Discussions, during the Mission to Ethiopia revealed that a considered response on this will at present be unlikely. Again, this gives support to the need for enhanced project development knowledge within EIA, especially in terms of financial aspects and investment targeting (discussed below).

⁸ Ethiopia has signed the World Bank's convention on the settlement of Investment Disputes and Nationals of other States, which provides for the international arbitration of disputes with foreign investors. MIGA (Multilateral Investment Guarantee Agency) guarantee programme will become operational as soon as pending claims for compensation left over from the period of the previous military Government have been resolved.

C. Institutional Framework for FDI Promotion

The principal Government agency responsible for most aspects of FDI in Ethiopia is the EIA which has the lead remit for promoting, coordinating, managing and monitoring all types of inward investment including joint-ventures. EIA reports to the Board of Investment (BOI) chaired by the Prime Minister. The General Manager of EIA is one of the seven Board Members of BOI. EIA is still a relatively young agency in comparison with its regional and international investment promotion competitors. It is seriously under-resourced; has not yet evolved a strategic planned approach to its promotion activities; and is constrained by a current lack of operational integration with the emerging strategies of the other key Government ministries and agencies.

A number of other Government agencies and private sector organizations are involved alongside EIA in delivering or contributing to Ethiopia's investment promotion effort. In the State sector, these include the Ethiopian Privatization Agency (EPA), established through Proclamation 87/1994 to privatize over 200 state enterprises accounting for some 20 per cent of GDP; the Ministry of Trade and Industry; the ministries and agencies associated with specific sectors such as mining and tourism; the Ministry of Foreign Affairs; the Development Bank of Ethiopia; and the ministries dealing with taxation remits including customs. Of these, EPA is potentially the most important as it regards FDI as an important privatization mechanism. The Regional Investment Promotion Agencies, known as investment bureaus, also have an important contribution to make in identifying, defining and promoting specific investment project opportunities and in encouraging FDI into their region.

The Ethiopian private sector plays a much smaller role in FDI promotion than in many similar emerging economies. This is the case, principally because of the absence of international commercial banking and financial services companies, as these remain reserved sectors for Government and Ethiopian investors. There are thus few effective private sector links into the international corporate community. Even the relationship of FDI with EIA's promotion activities is limited for reasons discussed later in the report. The national and city Chambers of Commerce are perhaps the most active (but irregular) participants in the FDI process but, will become a more important part of the FDI delivery framework in Ethiopia. It is suggested that there is merit in directly involving key private sector organizations and enterprises in investment promotion. The respective roles and contributions to FDI promotion of these key institutions will now be analyzed.

(i) Ethiopian investment authority (EIA)

The EIA is a relatively young agency which is still evolving its approach, ethos and organization. The evaluation of EIA's promotional and other activities is discussed under the following six broad headings.

- (a) Mandate, strategy and planning;
- (b) Organization and management;
- (c) Activities and influence;
- (d) Capability and resources;
- (e) Promotional integration;
- (f) Future development priorities.

The review in each section brings together the results of the review team's discussions with EIA executives and managers. The overall development priorities identified are those where progress can be achieved in the near- to medium-term.

(a) Mandate, strategy and planning

The EIA's mandate for investment promotion is fully recognized and supported by the Government and private sectors. The EIA has already established itself as the focus for national FDI initiatives. There is perhaps a need to extend its mandate to encompass the presently reserved sectors, especially as these sectors are considered for FDI participation. There is also a need to review the post-location monitoring service which (in most cases) is transferred after operating commence to other relevant Government agencies. Careful planning of such services is needed as they affect the continuity, understanding and partnership essential for securing follow-up investment projects as well as all necessary additional investment. The mandate to provide and monitor aftercare services is an important policy objective and consequently should remain with EIA. This, of course, will have major resource and funding implications.

Strategy and Planning are areas the EIA is still evolving a capability and that would perhaps benefit from technical assistance support, including the EIA staff secondments to investment promotion agencies in more successful countries. Through the EIA's Planning and Foreign Assistance Coordination Service, in conjunction with inputs from the five operational divisions of the Authority, the General Manager has formulated an annual planning process primarily linked to budget requests and general indicative planning. However, this is not the same as an operational output-driven plan undertaken by most FDI promotion agencies. The EIA should gradually transform its planning approach and purpose to mirror the same business attitudes and perspectives of private sector companies that form its FDI client base.

In addition, there is a clear case for Government, through the BOI, to bring all key ministries, agencies and appropriate private sector organizations, together to discuss and agree a long-term international investment strategy to provide an integrated operational framework for FDI promotion. The review team's assessment of national strategy documents that have been prepared and were in process of being finalized suggests that there is little integration between various actors directly or indirectly responsible for investment promotion. Consequently, there was (mid-1999) no agreed and integrated investment promotion strategy to drive and influence the efforts of the individual ministries, agencies or the EIA.

Such a strategy is an urgent priority, and must address issues such as Ethiopia's promotional strengths; target sectors, products and technologies; FDI promotion processes and participant roles; incentive packages and investor support; case promotion processes; essential infrastructure investment priorities; and costs of investment promotion. This must be a priority for the BOI. Designing an integrated strategy is not too difficult a task, but once created will help build cohesion, mutual understanding and enable a more efficient use of scarce promotional resources. It is expected that the new strategy designed by Foreign Investment Advisory Services (FIAS) will assist in this respect.

(b) Organization and management

The current organizational structure of the EIA shows five core operational departments each of which contain a varying number of team leaders or heads of divisions, three supporting units for legal services, administration and finance, and the planning and foreign assistance coordination service. These departments all report through the deputy general manager to the general manager of EIA and through him to BOI, of which the general manager is a member. The organizational structure of EIA reflects the political environment in which it was created. Both EIA managers and Government officials believe that they have served the Authority well since it was established.

All EIA executive, management and support staff consulted during the review team's visit to Ethiopia have a clear understanding of their responsibilities and roles within the organization. All develop work programmes and priorities in relation to their core responsibilities and most understand the present mandate and purpose of the organization. However, only few have knowledge and experience of their competitor FDI promotion agencies in other countries. Furthermore, in the absence of a coherent national promotional strategy, there has not been a requirement to shape EIA's organization in relation to its strategic and operational goals and objectives.

In considering the effectiveness of the present organizational structure and management of EIA, the following three important observations that emerged from the discussions with EIA managers and staff during the field mission to Ethiopia are worth noting:

- ◆ The present notion of EIA's organizational structure is that it is primarily *process* driven and that much of the activities undertaken by its staff have to do with regulatory aspects of FDI such as permits, reports and registration. It is interesting to note from the organigram present in diagram II.1, that the only three sectoral groups are in the Licence Registration and Coordination Department. Much of their daily work is on ensuring potential FDIs meet regulatory requirements;
- ◆ The present occupational structure and skills base is shaped by the nature of the tasks that are done in each Department and Division, which over the longer-term will constrain the emergence of multi-skilled teams and (from the experience of similar organizations elsewhere) encourage the strengthening of divisional walls and identities;
- ◆ At present, the organization is not FDI *client* centred, nor does it appear to have a customer-driven skills base or promotional process. It is difficult for public agencies like EIA to have a set client focus, especially when clients operate in the private sector and in foreign national cultures.

These organizational issues are important to EIA's future evolution and its competitiveness in an increasingly tough FDI environment.

(c) Activities and influence

Over the last five years, EIA has developed the basic portfolio of promotional activities, materials, procedures and systems required to attract FDI. The latest addition is an Investment

Guide for Ethiopia prepared with the assistance of the United Nations Conference on Trade and Development (UNCTAD) and the International Chamber of Commerce (ICC). Vital information about Ethiopia and its potential as an attractive investment location is being disseminated to potential investors across the world through various communication channels, including the internet. All these promotional activities have raised the profile of Ethiopia as a plausible investment location. However, as Ethiopia wishes to attract additional targeted foreign investment (e.g. new investment in sectors singled out by the Government as priority investment areas) there is a need to re-assess the existing investment promotion approach and activities.

The most important and immediate activities for EIA are the corporate research and project development functions, both essential requirements for the FDI targeting and client-focused innovations that already lie at the centre of best practice investment promotion. The skills needed to perform these functions should be acquired or developed within EIA. The Internet makes corporate profiling and analysis a much easier task than previously and thus, should be used more effectively by EIA. But, this must also be supported by training and assistance that enables enquiries and interest in opportunities to be assessed for FDI targets. The need for enhanced project development skills and capabilities is a second area to be given priority for the reasons set-out in the overview of FDI targeting presented in the next section. At present, the EIA does not have a basic capability in these areas.

The influence of EIA's activities in term of shaping the investment supporting role of other Government and regional agencies was briefly explored with partner organizations during the field mission to Ethiopia. The general perception of EIA's impact on their investment-related activities is that it has been limited.

(d) Capability and resources

The overall assessment of the review team regarding EIA is that there is a mismatch between its mandate as the spearhead of Ethiopia's critically important investment promotion efforts and the resources available to it (budget and manpower), which are limited and inadequate to perform the promotional functions effectively. Whilst it is always necessary to guard against self-aggrandisement by public sector agencies (budget size is power), it is absolutely impossible for EIA to plan, deliver and manage an effective investment promotion programme on the basis of, for example, its 1998-1999 budget level of around \$260,000. Even allowing for the impact of purchasing power parity (PPP) price adjustments in relation to internal expenditure by the Authority within Ethiopia. It is difficult to say at this stage exactly what additional resources would be adequate for EIA to perform its functions effectively. This will be determined taking into account all the promotional activities and training carried out by EIA in order to attract more investment into the country. At the current level of resource allocation, it is clearly unrealistic to expect a coordinated and successful marketing of Ethiopia as a potential investment location to be carried out by EIA.

An enhanced financial base for EIA is not required to increase staff numbers but rather to enable more effective training of existing staff. Training should consist of travel overseas to meet with potential clients; to attend appropriate promotional conventions; and (more importantly) to establish essential industry contacts and knowledge in the prime target sectors. The EIA will require a budget to commission independent advisors from within the country for key case support through

research and the development of project opportunities and to support the promotional activities of the regional promotion agencies. There is an urgent need to reassess the level of resources made available to EIA.

With regard to the development of an integrated approach to investment promotion, one possibility is for the Government to consider the option of secondment to EIA of younger professional staff from other Government, State and private sector organizations for limited periods of time. This is common practice in investment promotion agencies in other countries, where secondments are seen as producing real benefits in terms of sharing professional knowledge and skills; building effective personal-based linkages between agencies; extending the understanding of FDI promotion to a wider group of organizations; and widening the inputs into policy formulations and implementation.

(e) Promotional Integration

An effective investment promotion strategy requires that there is a high level of cohesion between the policy priorities and measures across the national economic development effort. The discussions with EIA managers and senior officials in relevant government departments and agencies indicate that FDI is not yet fully integrated into the emerging national and sectoral policies on exports, education, tourism and agriculture. This is understandable given that national strategies for these areas have only just been completed or are still in their development stages and that EIA had not (by the end of 1999) prepared its own strategic development priorities. The major contribution and role of FDI in the growth of Ethiopia's private sector is recognized and accepted by the Government. However, there appears now to be a need for the BOI to convene a working group from the appropriate federal ministries and agencies (once EIA has its own initial strategy completed) to ensure mutual coherence and consistency between the various sectoral strategies and the national investment promotion effort. This is a further priority policy issue.

(f) Future development priorities

The EIA, on the basis of evidence gathered during visits to Ethiopia, has at the senior executive level, a relatively clear understanding of its future strategic development priorities; but has not yet translated these into an operational business plan for the organization where expenditure and costs are related to target outcomes and benefits. Some of the broad development priorities for EIA identified during the Mission and outlined above will be brought together in the strategic and operational recommendations set out in the final section.

(ii) *Investment promotion by other Government agencies*

In addition to EIA, a range of other government ministries and federal and regional agencies have an involvement in the attraction of inward investment to Ethiopia or in the subsequent expansion of FDI businesses once established. At present, the investment promotion processes are relatively self-standing and uncoordinated, although all of the contacted agencies acknowledge that coordination will be required to raise the effectiveness of the present national effort to attract FDI.

(a) Ethiopian Privatization Agency (EPA)

The EPA was formally established in 1994 and began its strategic role of reversing the post-1975 wholesale nationalization of Ethiopia's private sector. The EPA's board of directors report direct to the Prime Minister. The EPA is located in the same building as EIA which should make for effective liaison between the two agencies, although at present tends to operate in isolation. The first phase of EPA's privatization (achieved through tender sales) focused on SMEs in retail, tourism and similar sectors. It is now focussing its attention on the sale of the 115 bigger enterprises.

The EPA managers envisage that many of the larger State-owned companies will be sold to foreign investors, partly because only they will be capable of raising funding and partly because it is believed that foreign investors will provide the necessary transfer of technology into the companies. For the major companies, project profiles and fliers have been prepared and a series of EPA promotional brochures have and are being prepared. Information on opportunities is also shared with EIA, although as of early 2000 active research to target appropriate foreign investors had not begun, even though potential interest was emerging, especially in the food and beverage sector. The point is, for privatization to form an important mechanism for attracting international investment into closer collaboration between EIA and EPA, especially in relation to project profiling and investor targeting, which is vital.

(b) Ethiopian Tourism Commission (ETC)

The ETC was established to capitalize on the country's combination of history and wildlife by attracting international tour operators to bring free-spending. Currently, Ethiopia lags well behind Egypt and Kenya as a tourist destination. Operators and those who do visit often find that hotels, guest houses and restaurants (especially those outside Addis Ababa) require inputs of investment and modern management. The potential for attracting the more affluent tourists (both leisure and business) has been proved with the opening in 1998 of the luxury Sheraton Hotel in Addis which is in league with other quality hotels in developed countries.

The ETC's goal is to increase international visitors to Ethiopia from around 115,000 in 1997 to 180,000 by 2000 and to 500,000 by 2005, predominantly in higher-value tourists. Priority is being given by ETC to attracting FDI into Ethiopia's existing hotels. The Hilton in Addis Ababa was the first to be actively promoted to overseas visitors, initially from the Middle East. Other hotel chains in key tourism areas are also being promoted for inward investment, predominantly through the ETC, but also in cooperation with the EPA as some of the hotels are among the public companies being privatized. There is an on-going promotional relationship with the EIA, although tourism does not appear to be in the EIA's priority sector list. It also lacks the financial resources or skills to make the necessary efforts required to attract FDI into the tourism sector.

(c) Ministry of Foreign Affairs (MFA)

In the immediate future, it is probable that EIA will not have the funds or the skilled personnel needed to open up representative offices in targeted FDI home countries. Consequently, the prime overseas investment promotion presence will be the Ethiopian Embassies under the direct control of the Ministry of Foreign Affairs (MFA). MFA thus has a key role to play in attracting

inward investment, which is slowly being developed with an appropriate initial focus on the Middle East and Asia. All ambassadors have been instructed to give priority to promoting Ethiopia as a suitable investment location, find markets for Ethiopian exports and encourage tourism to Ethiopia.

The commercial attaches are occasionally briefed by EIA on emerging FDI opportunities and are required to report activities and progress in investment promotion to MFA on a quarterly basis. However, in reality, this arrangement has not worked as initially planned. As investment promotion is envisaged to be part of activities performed by MFA, it is important that all ambassadors and diplomatic staff clearly understand this policy and strive to attract FDI. Closer links of MFA with EIA is essential. The MFA is considering the merits of occasional EIA presence in key target country embassies and of providing specialist training for staff.

(d) Ministry of Trade & Industry (MOTI)

MOTI has the prime responsibility for the formulation and implementation of industrial policies for export promotion. An export strategy was completed in mid-1998 which sought to encourage increased penetration of Ethiopia's agricultural goods into global markets with the initial focus on cotton, coffee, fruit and vegetables. Priority was also being given to promoting exports of textile and leather garments as well as other manufactured goods for regional markets. This promotion is the responsibility of a new export promotion agency, which also reports direct to the Prime Minister.

There is a potentially important role for MOTI and its specialist agencies to ensure an increasingly competitive base of local private sector enterprise which can supply goods and services to inward investors and thus reduce the import bill and balance of trade effects that often accompany FDI. This important role is recognized by MOTI and EIA and, in fact, the two public agencies have begun to consider how to help local suppliers link with FDI in all sectors. One critical precondition of this process is a better understanding of the pre-location assessment of supplier requirements and a capability to begin to create these whilst new FDI facilities are being constructed. These supply side linkages are critical in maximizing the technology transfer and multiplier impacts on the indigenous sector which are crucial to the future export promotion strategy.

(e) The Development Bank of Ethiopia (DBE)

The State-owned DBE is charged with the task of supporting national economic policy by extending higher-risk medium and long-term loans to large- and medium-sized enterprises. Priority is being given to growing companies in the resource, export and import-substitution sectors through loans negotiated by DBE's 300 staff and 32 branch network. Its current loan book reflects its policy-based focus and loans are often syndicated with other local financial institutions such as the State-owned Commercial Bank and the Construction and Business Bank. There are no concessionary loans as all are made at the prevailing market rate. Lending is directed at new and expanded private sector companies, whereas the Commercial Bank has a responsibility to support EPA and EIA activities. There are a number of ways in which DBE takes risks, including taking capital equipment and personal assets as collateral and repayment holidays.

The DBE managers recognize that there may be a role for the Bank in attracting FDI to Ethiopia. It could help strengthen the incentives package through providing project-based loans at concessionary rates, especially in support of re-investment expansions of FDI operations. This is likely to be restricted (as least initially) to agricultural exports, as this sector generates over 80 per cent of public revenues. A total of EB 300 million has been set aside to pilot this (supported by loan guarantees from the National Bank) through lending for post-shipment export costs up to 8 per cent of the capital value of shipments. DBE will also co-finance loans with the International Finance Corporation (IFC - the World Bank affiliate) and the African Development Bank with DBE providing collateral and managing the loans. The principal ways in which DBE managers envisage the Bank supporting investment promotion is through providing co-financing of FDIs and joint-ventures and to local businesses that are major FDI suppliers. In addition, DBE's support is envisaged through its in-house technical advisory staff helping their client companies serving FDIs to add value to DBE loans and thus improve their competitiveness.

(f) The Ethiopian Media Agencies (EMA)

The EMA review team, met with senior managers in the Ethiopian News Agency (ENA) and Ethiopia Television (ET) to explore potential roles in investment promotion. The principal priorities for both organizations are to pursue improvements in Ethiopia's image abroad and the early and radical improvement in the national telecommunications infrastructure which is widely perceived, both internally and externally, as a major operational constraint for the local and FDI business community. On the domestic front, both ENA and ET are making efforts to give coverage to business issues (including FDI) and there is the beginning of a specialist business press such as *The Entrepreneur* published in Addis Ababa. ET often picks up on new FDI projects, especially when located in rural areas. It copies these to Ethiopian Embassies abroad. Both agencies recognize that they have an obligation to function as development-orient-media, but are presently reactive in their roles. This opportunity requires further consideration in partnership with EIA.

(g) Ethiopian Airlines (EA)

As Ethiopia's most visibly successful commercial company, EA is playing a leading role in Africa's emerging air-transport sector. It is building an internationally successful businesses in training aircrew and maintenance mechanics, in flight simulator training and in assembling light aircraft for use in rural areas and agriculture. In overseas promotion of the country the company does more than any other single organization in the State or in private sectors. With an annual turnover in excess of \$280 million it is the largest State-owned corporation and one that has been continuously profitable over the last 18 years. The EA Board is aware that the company is in a unique position to play a lead role in investment promotion abroad and sees FDI and tourism as being critical sectors for Ethiopia's future. EA can and should play an important FDI support role for EIA through making its overseas offices available for investment promotion activities and providing information about investment opportunities within its own in-flight magazines and entertainment services. The relationship between EA and EIA is still weak and unstructured. Therefore, and priority must be given to building a strong partnership in FDI promotion.

(h) Regional Investment Offices (RIO)

The final group of public sector organizations which could play an important role in national FDI strategy and policy are the RIOs established throughout Ethiopia in 1992. RIOs have been given the responsibility to identify, develop and promote specific investment projects in their regions.

Most RIOs work within the framework of the national investment code although some have their own incentive schemes. Their priority functions are to licence domestic investors; research, identify and prepare local investment opportunities; help domestic and foreign investors acquire land or property required for their businesses; and host visits by potential investors. The precise nature and portfolio of investment promotion activities vary between regions and reflect the policy priorities of regional Governments.

The Oromia Investment Office (OIO) which is located in Addis Ababa and employs 45 persons is one of the largest RIOs in the country. Normally, 80 per cent of its work is in licensing and land issues, with only 20 per cent in investment promotion. Although in 1997/1998, 50 per cent of OIO's budget went to promotion as it undertook the basic investment opportunity research and prepared documentation, promotion brochures and videos. OIO staff have prepared (1999) 155 project profiles for promotion, most of which are relatively short and have few financial statements with the expectation that opportunities will primarily be of interest to domestic investors. Indeed, to date, 95 per cent of their case workload has been with domestic investors, with only a small number of meetings and contacts taking place with potential foreign investors.

The RIOs are generally under-resourced both in terms of skilled human resources and funds, and in most cases, staff have received little training, assistance or advice in essential investment promotion skills. It is also clear that many RIO's have yet to develop a strategy or action plan to guide their activities.

Relationships between RIOs and EIA are perceived to be generally good, although peripheral regions feel they are at a disadvantage as most FDIs want to locate in or near Addis Ababa. There is a need for EIA (and the EPA) to arrange an FDI Development Accord with the RIOs and for the DBE and the Government to consider special financial and tax incentives for the peripheral regions. In addition, it is recommended EIA take a lead role in planning and managing training provision in investment promotion for RIOs to ensure consistency throughout the country.

(iii) *Private sector FDI promotion*

In addition to specialized government agencies, there is an important role to be played in attracting inward investment by private sector organizations, and more importantly, by existing foreign companies operating in the country. At present, neither of these groups is fully involved in the FDI promotion process and there have only been limited attempts by EIA and the Government to understand and build upon their potentially influential contribution. The review team made only a brief assessment of this element of FDI promotion through meetings with the Addis Ababa Chamber of Commerce and two existing FDI companies in Ethiopia, namely MIDROC and Shell Ethiopia.

(a) The Addis Ababa Chamber of Commerce (AACC)

There is one National Chamber of Commerce and eleven city Chambers in Ethiopia. The AACC is the largest, oldest and most influential of the city chambers, with 20 professional staff and 45 support staff serving over 7,000 active members. The Chamber undertakes functions covering business and market information; trade affairs and overseas trade missions; business advisory services, especially to start-up businesses; business skills training; publication of business directories and advisory leaflets; and the operation of a small library, Internet service and web site. It also undertakes specific studies on the obstacles to doing business in Ethiopia and proposes new policies and/or adjustments to existing policies; promotes entrepreneurship, sectoral trade associations and the culture of democracy and free market system; and serves as a bridge between the Government and the the business community in Addis Ababa. The Chamber disseminates information on business developments within Addis and the economy as a whole through its two bimonthly newspapers namely, “Nigdina Limat” (Trade and Development), in Amharic language, and “Addis Business” in English.

The Chamber has an informal role in FDI promotion. The EIA introduces potential investors to AACC who offer their support in helping investors meet appropriate local suppliers of goods and services. This has evidently proved helpful to the relatively smaller FDI companies that have come to Ethiopia from other countries in the region and the Chamber sees itself as having the potential lead role in providing the essential *aftercare* support to foreign investors once they have established themselves. This is a key FDI development role normally undertaken by specialist divisions or regional agencies in advanced host countries which should be addressed by EIA in the future.

The Chamber wishes to have a more formal and planned involvement in the FDI system and process. The review team believes that EIA and the Government should identify the appropriate roles and activities for the national and city Chambers as an early priority. The Chambers, as the principal representative body for the private sector, do have concerns about broad economic policy aspects and investment policies and should, therefore, be used as a channel for transmitting these concerns into the policy formulation and implementation processes undertaken by EIA.

(b) Existing foreign investors in Ethiopia

It is now accepted that the international word-of-mouth promotion of a country by FDIs already in that country is a very important but little recognized part of the inward investment process. Senior executives in FDIs play a lead role in building the external image and corporate perception of the commercial profitability and attractiveness of a host country, within their parent corporations (perhaps determining follow-on investment) and in their contacts with their international suppliers of goods and services. In addition, it is clear that bad news and impressions of an operational location spreads faster and further than satisfaction. The role of existing FDIs in Ethiopia, many recovering from a period of State ownership following nationalization under the previous regime, is thus a critical current issue in FDI promotion policy, and one where improvements are policy priorities.

Discussions with existing FDI executives in Ethiopia suggest that they are not actively involved in FDI promotion activities and that contact with EIA and other appropriate economic

agencies are irregular and normally problem-driven. There are no regular and planned business development meetings with relevant agencies to review and evaluate progress of their plans and proposals. There appear to be common concerns about land acquisition; the continuing Government role in the reserved sectors (including the importing of oil for refining); the lingering issue of dividend payments; and especially the continuing closure of the economy to foreign commercial and retail banks which can make both intra- and inter-company trading difficult and expensive.

Banks are seen as having an especially important promotional role overseas and will not have a positive view of a nation that excludes their presence. This is a critical issue in the context of both the current globalization of banking and financial services and the rapid move toward electronic banking and funds transfer that is at the heart of the growth of e-commerce.

FDI promotion and encouragement must not stop or be curtailed, once a positive location decision has been made by a foreign investor. It is equally important to ensure the success and profitability of the initial capital investment and to help the locally-based FDI managers to win corporate HQ approval for further expansion and re-investment of profits and to strengthen their linkages with local suppliers and services as a means of reducing the national import bill. This aftercare support, increasingly called corporate development support, will become important in Ethiopia during the next decade. The management and resource implications of this should be built into future FDI promotion budgets.

D. Current and Future Challenges in Investment Policy and Promotion

In evaluating the effectiveness of Ethiopia's investment promotion activities and the challenges ahead, it is important to briefly consider the domestic and global economic and business environment in which EIA and associated ministries and agencies must operate. It will be especially important to see Ethiopia's investment challenges and potential through the perceptions, expectations and knowledge of foreign investors from, particularly those outside the region. To that end, this section addresses the internal and external investment challenges facing Ethiopia and identifies the areas of potential investment opportunities.

(i) Ethiopia's international investment challenges

(a) Internal economic challenges

Among the specific economic challenges and constraints that were identified by private investors during the field mission to Ethiopia, the following five require highlighting:

- 1) The comparatively poor infrastructure in many parts of the country, especially in relation to transportation, power and telecommunications;
- 2) The perceived over-regulation of the economy which diverts scarce management resources from more productive activities; and a continuing ethos of state sector bureaucracy;
- 3) The perpetuation of State control over important aspects of international business operations (e.g. imports of equipment and fuels), together with a myriad of regulatory procedures and approval processes associated with business activities;

- 4) A shortage of modern management skills and culture in the local private and public sectors, making it difficult to benefit from existing and potential international investment; although this is again an area where local business executives see a rapid pace of improvement;
- 5) The absence of an experienced business development framework that can assist local SMEs to improve competitiveness as suppliers to incoming TNCs. There is also lack of provision of efficiently serviced sites to host new FDI facilities and gaps in other essential economic development services to both local and international investors.

In addition to these five issues, there is the continuing challenge posed by instability in the region. In particular, the recent conflict with Eritrea, which has had adverse effects on the external perceptions of both countries. This is a serious concern given the relative nervousness of international investors in considering countries as potential investment locations. The Government must not underestimate the importance of an active public relations exercise in influencing the external perception of a country. As noted above, the perception of local FDI executives (both expatriate and Ethiopian) is also an important determinant of future inward investment flows. As negative images spread rapidly within corporate networks, they tend (unless actively combated) to persist long after the events have declined or disappeared.

(b) External economic challenges

The prospective global FDI environment which is currently facing major structural and qualitative changes, will also have impact on both the level and location of capital flows. There is little Ethiopia can do to influence such shifts, but awareness of them will enable future investment promotion activity to be carefully targeted to appropriate areas of opportunity and potential. The most important structural FDI trends likely to dominant the next decade are:

- ◆ Increasing concentration of corporate organizations through mergers and acquisitions (now including multi-nation mergers) resulting in globalization of corporate structures and activities and a consequent rationalization and contraction of production and support facilities into big units serving wide regions;
- ◆ The parallel move by global corporations into single sourcing of materials, components and the supply of manufacturing services, thus making it difficult for local suppliers to benefit from FDI purchasing linkages which, in turn, can encourage FDI enclaves though, generally, this is less important in the agriculture and raw material sectors;
- ◆ Globalization of manufacturing production and the lowering of costs of transport will open up opportunities for emerging nations to effectively bid for the *next* generation of manufacturing and production plants through lower labour costs, as TNCs close old vintage plants and replace them with vintage units in cost competitive countries;
- ◆ The trend toward a post-manufacturing international economy also means proportionately fewer mobile large-scale industrial plants to bring technology and skilled employment benefits to host nations. New technologies, in particular information and telecommunications technologies, are enabling future services-driven FDI to be operated from virtually anywhere on the globe provided skilled people are available;

- ◆ The competition between national and regional Governments throughout the world to pursue, attract and secure mobile international investment is now so strong that it has become a “buyers market” where MNCs obtain levels of financial and other support beyond what was seen as possible only a decade ago.

In the next decade, Ethiopia will be competing not only with countries in the African region but also countries in Latin America and South Asia to attract FDI from the major industrial nations in Europe, North America and the Far East. This will require an investment promotion strategy that identifies potential sources of international investment through a careful targeting approach that gives appropriate promotional priority to these areas.

(ii) *FDI targeting and project development*

The Government has identified a number of economic sectors as priority FDI areas for the creation of new enterprises capable of generating exports, domestic employment and for the building inter-sectoral linkages. The agricultural-led industrial development focus of economic strategy is reflected through promotion priority that highlights the major investment opportunities available in agriculture (food & beverages, cotton, horticulture, livestock, fisheries and forestry), manufacturing industries, mining and tourism. In all these sectors short project profiles have been prepared by Federal and Regional Government agencies summarizing specific investment opportunities, sometimes including more detailed market research information. These have been presented to the review team as inward investment targeting, as have similar project profiles prepared within the privatization programme.

In terms of current best-practice FDI promotion, the preparation of investment opportunity profiles by promoting agencies is not proper targeting for several reasons, including the fact that the focus is on the supply side. The market and financial benefits for potential investors are not actively considered and specific potential investors are not identified, assessed or positively encouraged to explore demonstrated financial benefits that meet their corporate investment criteria and priorities. In addition, the number and variety of investment opportunity profiles that had been prepared by early 1999 suggests that no considered prioritization of commercial project opportunities has been undertaken. This suggests that very little active promotion of investment opportunities has been undertaken to date beyond simple passive mailings.

There is a need for a better understanding of the concept of FDI targeting within the Government of Ethiopia and its operational agencies. More importantly, it should be recognized that EIA, as lead FDI promotion agency, currently does not have the financial, human and technical resources to introduce active FDI targeting even in a small number of priority sectors. Targeting requires careful professional planning, determination and imagination in delivery, adequate resources, an appreciation of current corporate concerns and priorities and patience.

(iii) *Targeting FDI opportunities*

Effective FDI targeting is a difficult task and one where intense competition from specialist agencies in an increasing number of host countries is raising best-practice benchmarks as well as the cost of taking part. A growing number of international companies are receiving investment offers

from potential host countries, in many cases supported by offers of financial and in-kind assistance to reduce the costs and risks of investing. Corporate executives in MNCs rarely respond to these generalized offers of “opportunities”, but are more likely to consider a detailed costed project that displays business and market realism, an informed understanding of the investor company interests and Government commitment at the highest level.

A detailed explanation of FDI targeting in operational terms is beyond the scope of this report. At this stage, what needs emphasizing is simply that if Ethiopia's objective is to promote specific investment projects that show significant and sustainable real financial gains for both the FDI company and the Government, assistance may be required from external consulting firms or individuals specializing in investment targeting. FDI targeting is now widely practiced by investment promotion agencies in many developed and developing countries. In this respect, UNCTAD has assisted countries to better understand the different approaches to investment targeting as well as the method of operationalizing effective FDI targeting through workshops designed to encourage exchange of experience on best practices in FDI targeting. The broad steps in project targeting can be summarized as follows:

- ◆ Assess the domestic economy carefully to identify a small number of priority economic sectors that have sustainable growth and competitive potential in market terms;
- ◆ Within the priority sectors the same screening must be undertaken to identify specific investment projects that can surmount market, technical, management and financial hurdles, each set at best-practice levels. For the best potential projects that survive the screening process, detailed business plans and financial forecasts must then be prepared showing clearly the assumptions and goals involved;
- ◆ The specific industrial and market segments for *each* project must be researched and examined to identify the individual relevant FDI companies operating in these markets; their current corporate strategies, investment priorities and corporate decision-making structures; their recent experience in emerging countries; and the rationale for considering an investment of the type identified;
- ◆ Prepare a confidential project investment prospectus at the level of detail that FDI corporate executives now expect and require, including a full consideration of all risk factors; submit this to an independent due diligence assessment to ensure accuracy and realism in financial forecasts and in areas of essential support; and prepare a final project business plan for submission to specific potential international investors;
- ◆ Carefully identify the key corporate executives within the target FDIs to whom new investment projects will be referred for consideration; plan for an initial exploration meeting to make preliminary contact and to raise their interest; and reflecting the feedback and ethos of this meeting, the specific proposal can then be introduced.

These steps will only take an investment promotion agency through the first stage of making the corporate contact. The hardest promotion and negotiation tasks are still to follow. Meetings will multiply should there be genuine investor interest. Senior Government officials will become involved and project specifications (and costing) will need to be regularly revised. In addition, active promotion to bankers, legal teams, consultants and a range of FDI corporate executives will be required. Patience and persistence are essential as well as the capability to cease promotion

efforts should the target company lose interest, in which case attention should immediately be shifted to the next appropriate FDI. Continuity of personal contact is always essential, and promotion agencies and the Government must bear this in mind in instituting active targeting.

(iv) *Ethiopia's FDI Targeting Capability*

As of early 2000, Ethiopia did not have the capacity to undertake targeting of FDIs, principally because the EIA lacked the necessary resources to move into an active promotional stance. At present, EIA has a “scatter-gun” approach to the attraction of foreign investment, undertaking general promotion of Ethiopia as a potential investment location in the hope that some investment will be attracted into the country. This approach partly reflects the EIAs funding constraints; its inability to prioritize opportunities and transform these into operational projects; and the present lack of a clear corporate strategy. The EIA management understands the need for investment targeting but accepts that it has little operational experience or knowledge in the key areas and tasks outlined above. Given the intense global competition in attracting inward investment, effective FDI promotion based upon a carefully planned target portfolio is a strategic policy priority for EIA.

It is also worth noting that there is virtually no FDI targeting undertaken by other government departments or agencies in Ethiopia. Moreover, the project profiles prepared by institutions such as the Addis Ababa Chamber of Commerce are mostly simple technical specifications and/or listings of potential projects that can be of no possible interest to foreign investors who will have far greater technical expertise in house.

(v) *The FDI policy challenges to 2010*

The investment promotion challenges Ethiopia is likely to be faced with in the immediate future can be summarized as follows:

- ◆ The policy framework and operational requirements in Ethiopia facing international investors still have aspects that are bureaucratic and unnecessary, including sectors that remain closed to private investors; irrational minimum capital investment requirements; and a dispersal of investment promotion efforts between the EIA and other Government agencies;
- ◆ To date, there is, little direct involvement of existing international investors in the international promotion process, thus missing an important opportunity to tap into a wide range of international corporate contacts and also to draw upon the management skills and experience of such investors to support national promotion activities;
- ◆ The present international investment promotion effort has (as of mid-2000) no clear promotion strategy; no operating business plan; or agreed project development priorities to guide deployment of its scarce resources either within EIA or more generally at the national level. These, in themselves, may not guarantee greater success in promotion, but they are requirements for resource planning;
- ◆ The present EIA organization is seriously under-resourced in terms of the necessary scale and content of its investment promotion activities; its staffing, equipment and information resources; and its access to and status with other relevant government

departments and agencies. Continuation of the present level of activity will ensure only a reactive approach to promotion.

Some of these investment promotion challenges are recognized by the senior managers and staff in EIA, but effective response will require a coordinated effort involving all the key actors in investment promotion process, including the Government at the highest level, the EIA, other public sector agencies, especially those identified above, regional investment offices, local private sector organizations, and foreign investors already operating in the country.

It should be noted that, improving the effectiveness, efficiency and economic development impact of Ethiopia's international investment promotion activities will take time, resources and policy commitment. Preparation of an implementation plan to pursue such improvements will be a major advisory project in itself.

E. Investment policy and promotion strategy for Ethiopia to 2010

Consideration of future investment policy and promotion priorities and activities for Ethiopia should be seen in the context of a medium-to long-term strategy. Building an effective FDI promotion capability takes time and requires resources to create momentum and critical mass. The most successful investment promotion agencies in the world are those, which have developed over a period of time and through more focused policy measures and strategies, the capability to market the host country and to attract and accommodate FDI. How can Ethiopia acquire such a capability? What are the medium- and longer-term measures that need to be taken in order to make Ethiopia an attractive location for FDI?

(i) *Ethiopia's international investment opportunities*

This section will briefly examine the range of international investment opportunities open to Ethiopia. There are four inter-related types of international investment, each of which requires a distinct promotion and management approach:

- ◆ Investment in privatization;
- ◆ Corporate greenfield investments;
- ◆ Expansions of existing FDI;
- ◆ Joint ventures

The EIA and other public sector agencies are active on projects in all of these groups of international investment, although without the benefit of either a strategy or a fully planned management response. A comment on each of these groups will be helpful as background to the policy conclusions and proposals at the end of this report.

(a) Investments in privatization

As indicated above, although the privatization process in Ethiopia appears to be gathering momentum, it suffers from lack of adequate resources for financial and skilled personnel to drive the programme ahead, in a strategic manner. The brief review of the privatization programme suggests

that there are State corporations and enterprises in a wide range of economic sectors that could be actively targeted to foreign investors.

Experience elsewhere with privatization of State-owned enterprises and industries show that, in some cases, such programmes are not successful. This is especially true where short-term policy objectives of giving priority to maximizing Government capital receipts have obscured the longer-term need to evolve a sustainable business that maintains employment, exports and tax revenues. The key requirements for an effective privatization investment programme are to:

- ◆ Institute in-company commercialization strategies and programmes in advance of privatization to begin the process of corporate change that will inevitably be required by international investors;
- ◆ Promote the most attractive investment opportunities first and then work through the portfolio of privatization candidates leaving the more difficult enterprises until agency experience has been created;
- ◆ Identify and research appropriate target investors in advance of approaching them to build an understanding of their current activities and priorities and to establish how investment in Ethiopia will support these corporate goals;
- ◆ Develop appropriate privatization deals in advance, including possible on-going support packages, and outline of financial proforma that demonstrate the viability and financial returns to the investor.

The staff in the Privatization agency are well aware of some of these promotion requirements, but currently do not have the resources or practical experience required to implement them successfully. However, in an attempt to deal with this problem, the Government has initiated a review of the overall privatization programme in Ethiopia. External consultants are in the process of evaluating nearly 140 enterprises with a view to recommending detailed privatization modalities. International investment promotion through privatization programme is especially important as it incorporates visible, real assets often with established market positions. It is an integral part of international investment promotion and should be managed as such where the candidate companies are unlikely to attract Ethiopian investors.

(b) Corporate greenfield investments

The arrival of a new international investor with the capital and commitment to create a new greenfield business venture tends to be given priority by national inward investment promotion agencies and is often regarded as the most desirable of FDI ventures. Within this group are a range of greenfield investment situations, including first time investments and investments in new types of economic activity by investors already established in the country, the latter being perhaps the most productive form of investment. In the majority of cases, potential investors will already have researched and confirmed the market, infrastructure and financial aspects and will in all probability serve an established customer base served by imports.

There is still a need for an active promotion approach to corporate greenfield investments. This will have to be tailored to the requirements and potential of each situation, and should focus on the provision of infrastructure; developing local supplier linkages; training staff and employees; and

reducing the administrative delays in processing customs duties, capital grants, import licences and operational permits. Effective promotion would have all of these issues planned in advance and would also make an effort to understand the investor's business, the markets involved and the associated strategic development issues. EIA has begun to evolve a capability to deliver this support, but the present organizational and management framework may not be fully appropriate to the requirements of such greenfield investors.

(c) Expansion of existing FDI

The in-situ expansion of existing and corporate operations and facilities is recognized as the most valuable and cost-efficient form of international investment promotion. This is the case for it confirms the success of the initial capital commitments and is a visible signal of success to other potential investors. It is important to actively promote and support existing investors, especially in the present globalization environment where plant directors will have to bid against directors of the company's other plants for projects. This requires investment promotion staff to maintain regular contact with local plant directors; provide support to local plants to promote their competitiveness; help such plants maintain and enhance their intra-corporate performance; and build mutually profitable linkages within the economy.

An important part of Ethiopia's international investment strategy must be the development of a client development capability to support existing foreign investors on a continuing basis. This should not be seen as aftercare, which implies a one-off capital investment and has a tone of “afterthought”, but as an on-going partnership to strengthen, extend and improve the continuing stream of investments required by companies.

(d) Joint-venture investments

This category of international investment can be a complex one, especially in joint-ventures between a State agency and a private investor, having different strategic objectives, investment priorities, management ethos and operating experience. Increasingly such joint-ventures are limited to start-up situations with a subsequent sale of the State's share to the private partner, but they may (in Ethiopia's situation) also have a role in the privatization process. Promoting joint-ventures is very difficult, especially for greenfield projects; requires additional skills and experience; and will often be legally and financially complex. Joint-ventures can play a role in international investment promotion, provided the skills are available and that enhanced financial support (including in-kind) is available.

Overall Assessment

The review team's main recommendations on investment policy and promotion are presented in the last Chapter of this report. In concluding this Chapter, however, two points need to be highlighted.

(i) *Investment policy and promotion trends and commitment*

The existing statutory policy framework for international investment in Ethiopia and the promotion of opportunities through EIA requires only minor revision. Moreover, judging by recent adjustments to the investment code and Government policy statements, it would appear that additional reforms to further open-up the economy to FDI are underway. However, in order to ensure that these reforms lead to effective promotion, it is essential to undertake periodic assessments of the inward investment achievements, through case-based evaluations of the economic impact of international investment. It is also essential to appraise the efficiency of FDI management process at all stages of investment from enquiring to post-location development. The outcome of such reviews will inform EIA and the Government on necessary adjustments in the investment policy framework.

(ii) *The need for medium- to long-term strategy and vision*

There is an evident need to evolve an operational long-term strategy for inward investment to Ethiopia for delivery by EIA and its partner agencies through a rolling three-year action plan. It is suggested that this strategy will have a 10-year focus, with quantitative targets and qualitative goals being set for overall FDI performance by 2010. This must be supported by a clear business plan for EIA that explains the nature, level, focus and schedule of its FDI activities over the next years in detail; defines its activities and resources for the next 3 years in outline; and for the next decade, in strategic terms. The strategic issues for FDI promotion to be addressed include the following:

- ◆ International investment objectives, goals and performance targets;
- ◆ Balance between proactive and reactive promotion;
- ◆ Sectoral, regional and enterprise priorities;
- ◆ Priority sectors and regions to be targeted;
- ◆ Infrastructure needs and priorities for investors;
- ◆ Incentive packages and regional comparisons;
- ◆ The role of other Ethiopian agencies and organizations in promotion;
- ◆ Resource and management requirements, including external funding;
- ◆ Means for managing and driving investor enquiries and interests.

Such an operational strategy will enable public and private sector organizations to better understand and coordinate their roles in the international investment process; enable executives and managers to more effectively manage promotion and thus improve effectiveness of resource use; and ensure consistency in approach and purpose throughout all stages of the investment promotion process. The investment promotion strategy and business plan should both be formulated and produced by the executive and management staff in EIA with appropriate external advisory support and with involvement of the main partner organizations in Ethiopia including EPA, the Ministry of Trade and Industry, the Addis Ababa Chamber of Commerce (representing the private sector) and the Ministry of Foreign Affairs. Both the strategy and plan must be operationally focused; fully costed and resourced; task-driven to ensure delivery by specific management and supported by performance monitoring, covering quantitative and qualitative measures.

Table II.1

Number and Investment Capital (Million Birr) of Domestic and Foreign Investment Projects (New and Expansion) which have commenced operation by Year, 1992/1993-1997/1998⁽¹⁾
Current Prices

Operation start Year	Domestic		Foreign ⁽²⁾		Total		FDI as percent of Total	
	#	Capital	#	Capital	#	Capital	#	Capital
1992/1993	23	60,40	2	67,65	25	148,06	8.0	59.2
1993/1994	79	480,78	-	-	73	480.78	-	-
1994/1995	233	1,557.22	1	3.56	234	1560.77	0.4	0.2
1995/1996	310	772.49	2	99.33	312	881.82	0.6	10.4
1996/1997	237	1,233.91	4	1,194.35	241	2428.26	1.7	49.2
1997/1998	281	990.85,103.45	12	1,722.56	293	2713.21	4.1	63.5
Total 1992-1998	1,163		21	3087.45	1178	8212.90	1.8	37.6

Source: Ethiopian Investment Authority, Statistics on Investments in Ethiopia: No.1 (EIA Addis Ababa, September 1998); tables 2.12 & 2.14

Notes: (1) 6 months only (2) including Joint Ventures.

Table II.2

Number and Investment Capital (Million Birr) of Domestic and Foreign Investment Projects (New and Expansion) which have commenced operation by Region and Broad Sectors, 1992/1993-1997/1998⁽¹⁾
Current Prices

Investment Sector	Domestic		Foreign ⁽²⁾		Total		FDI as percent of Total	
	#	Capital	#	Capital	#	Capital	#	Capital
Regions								
Amhara	109	401	2	1,349	111	1,750	1.6	77.1
Oromia	329	1,164	3	30	332	1,194	0.9	2.5
Addis Ababa	193	1,063	15	1,674	208	2,757	7.2	60.7
Tigrey	256	1,870	-	-	256	1,870	-	-
SNNP	226	340	-	-	226	340	-	-
Others	50	247	1	44	51	291	2.0	15.1
Sector								
Primary	514	1385	3	1,210	517	2,596	0.6	46.6
Secondary	497	1266	11	452	508	1738	2.2	26.0
Tertiary	152	2,434	7	1,435	159	3,889	4.4	37.1
Total 1992-1998	1,163	5,105	21	3,097	1,184	8,262	1.6	37.8

Source: Ethiopian Investment Authority, Statistics on Investments in Ethiopia: No.1 (EIA Addis Ababa, September 19...): tables 2.12,2.13,2.14 & 2.15

Notes: (1) 6 months only (2) including Joint Ventures.

Table II.3:
 Number and Investment Capital (Million Birr) of Wholly Foreign-Owned and Joint-Venture
 Investment Projects Approved (New and Expansion) by Country of Origin 1992/1993-
 1997/1998⁽¹⁾, Current Prices

Region of Origin	Wholly-Owned		Joint Ventures		Total		Share	
	#	Value	#	Value	#	Value	#	Value
Middle East	22	2481.74	27	2960.45	49	5442.19	32	66
Africa	23	898.08	3	40.73	26	938.81	17	11
European Union	19	494.42	23	708.85	42	1203.27	28	15
Asia	8	128.54	5	42.53	13	171.07	9	2
North America	7	81.19	7	297.03	14	378.22	9	4
Caribbean	2	70.40	-	-	2	70.40	1	1
Other Europe	4	36.24	2	53.44	6	89.63	4	1
Total	85	4,190.61	67	4,103.03	152	8,293.64	100	100

Source: Ethiopian Investment Authority, *Statistics on Investments in Ethiopia: No 1* (EIA, Addis Ababa, September 1998); tables 2.5 and 2.6. Note (1) 1997/98 is first six months only.

Chapter III

Agricultural Sector

Introduction

This chapter focuses on two aspects of the Ethiopian agriculture sector: the potential for technological change with emphasis on the management of research and extension services and the policy changes or adjustments required; and the potential for investment in the sector. Agriculture is the mainstay of the Ethiopian economy. Currently it contributes over 55 per cent of GDP, accounts for 80 per cent of aggregate merchandise exports and employs an estimated 80 per cent of the labour force. The Government has made agriculture its primary priority, as demonstrated by the increasing share of capital expenditure it has devoted. However, the sector is still confronted with immense problems, although its performance has improved greatly in recent years due largely to improvements in domestic input supply capacity and growing participation of the private sector in the production and marketing of agricultural goods. The Government also wishes to strengthen linkages between agriculture and the manufacturing sector and to that end, has introduced incentive measures that encourage such linkages. This chapter will examine how effective those linkages are and the ways in which technological and innovation systems in Ethiopia could be strengthened to support the development of agri-business.

A. Agricultural Development in Ethiopia

Ethiopia's agricultural development has reflected its more general economic and political history since the Second World War. During the 1960s, foreign trade and exchange regimes were relatively open and export-led (mainly agricultural) development involved the expansion of surplus land under cultivation. There was little need to improve productivity and export-led growth was based on exports of coffee, hides and skins, sugar and cotton. There was little diversification of any kind. After 1960, import substitution industrialization (ISI) was gradually super-imposed on the prevailing pattern and this combined with the radical re-structuring of the economic system associated with the military regime, adversely affected development. Import substitution policies placed strains on the balance of payments, local industrialization stagnated, that by the late 1980s "the manufacturing sector (had become) unable even to meet the limited domestic demand".⁹ It was also increasingly unable to absorb surplus labour from the rural areas as population grew from 18 to 51 million between 1960 and 1990. All this placed growing strain on an agricultural sector that had become even less competitive as time went by. Private capital formation in agriculture had begun to fall in the 1970s and deteriorated even further in the 1980s. By the early 1990s average agricultural incomes had also fallen substantially and poverty had increased.

The situation with exports has fared no better. Exports (the vast majority of which are agricultural) reached their peak in 1973-1974. By 1996 their absolute purchasing power had fallen by nearly one-half with little improvement in recent years. Indeed the 1997 World Development Report indicated that exports per person in Ethiopia for 1995 were the lowest of 12 comparable

⁹ See Ministry of Agriculture (1994), p 3.

developing countries by a considerable margin. Moreover, export composition is also a problem. In 1997 coffee still accounted for nearly two-thirds of total exports; on other natural resource based products, such as hides and skins are low; and manufactured exports are negligible. Though recent data is not available, informal discussions indicate that exports have not reached the target estimate for 1998/1999 by a considerable margin. In short, despite the concerted efforts by the current Government to boost agricultural production and attract private investors into agriculture, the sector has remained fragmented, inefficient and in great need of technological improvement.

It is this combination of inefficiency in both industry and agriculture that has produced the present Government's strategy of agricultural-development-led industrialization (ADLI). According to the Ministry of Agriculture, this strategy "visualizes export-led growth which feeds into an interdependent agricultural and industrial development. Exports, be it agricultural or mineral, initiate growth thereby creating the space for ADLI which becomes self-generating. Hence the strategy has two layers, an outer crust of export-led growth and an inner core of ADLI".¹⁰ The export (outer crust) contribution will come through the supply of commodities for direct export and through industrial value added, with the emphasis increasingly on the latter. The inner crust will come in two ways. First, by establishing a deliberate reliance of industry on domestic agriculture as inputs to agri-business of various types. Second, it is intended to improve smallholder productivity thus reducing employment pressures and acting as an increased source of demand for local industrial goods.

It is clear therefore, that improved technology is seen as a necessary adjunct of the wider strategy. To begin with, emphasis was placed on labour-augmenting technical change, that is through better cultivation practices allowing for greater use of family labour. It was then anticipated that as improvements took place, attention would be placed on better seed application, fertilizer use and minor mechanization, all brought about by an improved extension system. At the same time ancillary inputs of credit (rural banks), rural infrastructure (feeder roads) and water supply would ensure that change would not be stifled by wider systemic shortages.

This broad strategy has received wide support in the country and has been endorsed by donor agencies, including the World Bank, which has placed emphasis on the urgent need for manufactured exports suggesting that much of this will involve agri-business. In terms of export strategy, the aim is to focus on a few selected agricultural commodities - coffee, cotton, fruits and vegetables, livestock and livestock products. It is also suggested that the export strategy should explicitly target sectors such as leather and garments/textiles, which are likely to realize profits immediately. However, at the same time it is important to ensure the rapid transition to low tariff structures is not too difficult for the "fledgling" sectors to cope with. It shall be seen that in the case of two such sectors (hides/skins & garments/textiles) there is still a case for protection, albeit transitional. After all as a least developed country, Ethiopia still has five years before adopting WTO rules on international trade. As this is the case, it may be wise for it to take advantage of this 5-year period.

The review team made an assessment of how effectively the science, technology and innovation system in the country can be brought to bear on the broad strategy of the Government. A series of interviews were held with staff in various Government departments, donor bodies,

¹⁰ See *Ibid.*, p 5.

industrial organizations and education/research centres to try and get a more accurate picture of the current situation. These included a regional research centre (Adet), a national research centre (Holetta), the Ethiopian Science and Technology Commission (ESTC), the Ethiopian Agricultural Research Organization (EARO), the Extension Service in the Ministry of Agriculture, the Public Enterprises Supervising Authority, the National Fertilizer Industry Agency (NFIA), the Ministry of Economic Development and Cooperation (MEDAC), the National Seed Industry Agency (NSIA), the Akaki Spare Parts & Hand Tools Factory, the Investment Office of the Amhara National Regional State and the World Bank. The results of this analysis are presented below.

B. The Organization and Management of Technological Change in Ethiopian Agriculture: Review and Assessment of Recent Reforms

(i) Strategic and organizational changes

The Ethiopian National Agricultural Research System (NARS) is now undergoing a radical re-structuring under a World Bank programme called the Agricultural Research and Training Project (ARTP). The main organization now in charge of agricultural research is EARO. The old Institute of Agricultural Research (IAR) that funded research proposals on a traditional hierarchical mode no longer exists. EARO was established as part of a move to rationalize science and technology governance that had become increasingly dispersed and unproductive. It was the result of a series of deliberations of a task force set up by the National Science and Technology Council in 1994. Its major role is to act as a national coordinator of an autonomous, decentralized research system, is based upon a geographical (agro-ecological) rationale. R&D centres have programmes that deal with local problems and are correspondingly funded by regional Governments.¹¹

The funding basis appears to be a traditional scientific one although emphasis is given to the intellectual coherence of proposals. The argument given by the ESTC is that the system had become so bureaucratic under the old regime that very little of scientific value was being done. Initially, it is hoped to raise the general quality of the Research and development (R&D) and eventually a greater degree of decentralized funding will be permitted. At a higher level there are various sectoral councils that advise senior ministers on science and technology policy. These councils are reflected in ESTC departments that act as secretariat for policy implementation.

In rather more detail, the proposed key objectives of the ARTP are as follows:

- ◆ Making the newly created apex national organization for research (EARO) fully functional with appropriate working procedures and systems;
- ◆ Building participatory approaches in a decentralized agricultural research system;
- ◆ Establishing a management information system and networking of information systems;
- ◆ Fostering effective linkages between research, extension and farmers on the one hand, and research centres, domestically and internationally on the other;

¹¹ As we shall see below superimposed on this framework is an orthogonal scheme focused on commodity-based research. The main issue then becomes one of how coherent the overall strategy will be.

- ◆ Rehabilitating and strengthening the existing research infrastructure and extending it to hitherto uncovered and harsh agro-ecological areas characterized by extreme poverty;
- ◆ Building human resource capacity for agricultural research through technical assistance and training;
- ◆ Strengthening the Alemaya University of Agriculture (AUA).

Funding of \$90 million for ARTP is provided by the International Fund for Agricultural Development (IFAD), the World Bank (e.g. through the IDA), and the Government of Ethiopia. Primary expenditures will go toward the creation of 6 new regional research centres for agro-ecological zones that are poorly served at present, upgrading of existing centres, human resource development (largely through assistance to the AUA) and assistance in technology transfer (extension). The process will take five years to complete.

EARO itself is currently in the middle of a detailed strategic planning exercise that is as interesting for its “process” nature as it is for the final document that should emerge. The new strategy is one based on 18 agro-ecological zones and 7 main focal areas. These are:

- (i) Crops;
- (ii) Animal science;
- (iii) Forestry;
- (iv) Soil and water;
- (v) Dry-land agriculture;
- (vi) Socio-economics;
- (vii) Regional extension farmer linkages.

The strategy has gone through several stages. All field directors were asked to prepare an initial 3 to 4 page draft summarizing their views about the future directions of agricultural R&D in Ethiopia. When the review team visited Ethiopia, the planning process was about to move onto the next stage, which was to conduct a series of empirical studies for each region to enable a more quantitative basis for the final EARO strategy. The outcome is expected to be a ten-year strategic plan that will guide agricultural research policy. Perhaps more important, however, is that the process itself is certainly an ambitious attempt to achieve genuine acceptance of the proposed new research direction amongst NARS stakeholders since it is doubtful if operational budget decisions will be guided by such a generic text.

(ii) Agricultural research and extension in the smallholder sector

It is probably in the smallholder sector that most development work still needs to be done. In the words of a recent Government communication with the International Fund for Agricultural Development (IFAD).

"Despite the importance of agriculture to the economy, the country is faced with low levels of agricultural productivity and degradation of the natural resource base which are mainly attributed to the inefficient technology that has been practised by the peasant sector which accounts for over 90 per cent of agricultural production. ...Smallholder agriculture is

therefore, and will remain, the most important sector for the diffusion of improved technology; it needs to be backed up by a strong agricultural research system.¹²

Indeed, in Ethiopia, the importance of science and technology as a means of raising agricultural productivity was realized as early as the 1940s when the first agricultural schools were established at Ambo and Jimma. These were followed by the founding of the College of Agriculture and Mechanical Arts at Alemaya (now the Alemaya University of Agriculture) in the mid-1950s and the Institute of Agricultural Research (IAR) in 1966. The IAR became the focal institution for managing agriculture related research in Ethiopia that has developed extensively since helped by substantial donor support. But as the World Bank (1998) argues, the national agricultural research system development has not been that successful.

Some progress was made in terms of building-up research credibility through the development of research centres, training manpower and generating improved technologies for crops, livestock and natural resource management. Progress has been affected by many constraints, including a lack of clear agricultural research policy, poor institutional relationships, inadequate coverage of some agro-ecologies, such as the moisture stress areas, and poor emphasis on livestock and natural resources research.¹³

(iii) Revised strategy

Central to the changes currently underway is the reorganization of research and extension governance. It is on this point that the Review Team concentrated its attention. Under the old IAR system funds were provided on the basis of a conventional peer review procedure that did not consider farmer needs with little regard to any measurable outputs, even of a scientific character. There were five federal R&D centres and a number of regional ones. The new system is based upon the twin notions of agro-ecological zones and commodity focus with EARO seeing its role as a facilitator rather than a major research funder. Agro-ecological research is carried out in the regional centres and funded by regional fiscal resources. Commodities (of which there are some 18 “priorities”) are each assigned “coordination centres” that act as R&D leaders assisted by a number of satellite “cooperation centres” that specialize in the R&D relevant to agro-ecology. The former and the latter can in principle be any R&D institutes in Ethiopia whose work is most appropriate although the ultimate allocation decision rests with EARO.

However, there is a belief on the part of some interviewees that, in practice, the lion's share of commodity research is likely to continue to go to the central region of Oromia.¹⁴ The main reason is that four of the five old federal centres (funded directly by EARO) are sited in that region. In fact the Review Team was informed that at present the federal centres we responsible for practically all coordination. Moreover it is not clear how genuinely “agro-ecological” the commodity R&D is? To the extent that is so, there could still be, in addition to the regional biases outlined above, a strong bias toward science and away from farmer needs. This is a fundamental point since it is a major

¹² See World Bank (1998) p 2.

¹³ Ibid. p 2.

¹⁴ In fact in one regional centre visited the Review Team found that less than 20 per cent of its funding came from central “commodity focused” research resources.

current issue in discussions on international agricultural research,¹⁵ particularly with reference to the large international agricultural research centres (the so-called IARCs) managed under the auspices of the Consultative Group for Agricultural Research (CGIAR).

Increasingly, it is argued that using individual commodities as the primary R&D focus is an inefficient generic procedure for most developing countries. Not only does it tend to underplay the complex nature of typical subsistence farming but it is also inherently expensive, science driven and unduly centralized. At the level of the NARS, research centres have often tended to become isolated from economic production, with research scientists seeing their role and function in professional rather than production terms. Research projects are often pursued as much for scientific interest (with the goal of publishing results) as for relevance to the needs of poor farmers. There are difficulties in establishing organizational structures that can focus on the broad (interdisciplinary) problems faced by farmers.

This then becomes reflected in funding patterns, since resources get allocated according to scientific criteria by funding bodies advised by professional scientists whose criteria of excellence are "scientific" rather than developmental. Finally, publicly financed extension systems have difficulty coping with the demands made on them for a variety of reasons. These range from shortages of adequately trained human resources to the sheer operational difficulties of organizing and managing the complexities of new technological packages in such a way that they can reach a receptive audience of a reasonable proportion of the relevant farm population.

The key question is, therefore, how genuinely agro-ecological the new system in Ethiopia is likely to become in view of the continued support for commodity-based research. The indications are that the Government of Ethiopia is genuine in its desire to change the approach to agricultural research. For example, EARO is on record as stating that technology generation will henceforth be at least as important as scientific merit and a good deal of regional centre funding will not of course come from EARO itself. Moreover, EARO now has a mandate to provide support to commercial farmers, exporters and other forms of agri-business.

Another reservation about the current broad "science-led" approach is that little consideration seems to have been made of imaginative private sector involvement.

The private sector may act as a new and better avenue for providing technology (and related) needs of farmers. The relative failure of public sector technology sources also indicate the need for associated policy reforms that see technology transfer in a much more holistic light than is conventionally understood. Two examples of effective private sector involvement in developing countries are presented in box 1. The point here is not to imply these experiences are immediately applicable to Ethiopian conditions but to highlight that Ethiopian science and technology policy should place much greater emphasis on initiatives like this if long-term economic success is to be achieved, especially in agriculture. It will also be necessary for policy makers to give much more attention to institutional reform than has been the case in the past.

(iv) *Agricultural extension*

¹⁵ See, for example, Presley 1998.

In addition to research, there appears to have been significant improvements to extension procedures over the past few years. According to a senior official in the Ministry of Agriculture, there was practically no extension to speak of in the period 1974-1983. In 1983, the Government introduced a food self-sufficiency programme based on the training and visit (T&V) type of extension system, which this also met with limited success. Accordingly, upon the advent of the new regime in 1991, the Government instituted a new system based on farmer participation. This was prompted by the “Sasakawa Global 2000” initiative although initially there was little response on the part of the farmers. A participatory demonstration and training extension scheme (PADETES) has been established to help with familiarization of the scheme. Since then, the number of farmers reached has increased rapidly. In 1994, there were only 1,600 farmers reached. In 1995, the number increased to 32,047. But by 1996, the scheme had reached around 350,000 farmers and dry land zones were included. A year later, a range of new packages had been developed and some 632,852 farmers had been reached. It was estimated that the figure had reached 2,986,271 by 1998.

Essentially, the new system is oriented mainly toward assessing farmer needs and hence advising on R&D priorities, with a strong participatory and human resource development dimension. For example, in one regional research centre visited, there was a dedicated research and extension (R&E) section mainly concerned with fulfilling the ALID strategy of setting up on-farm demonstrations. In addition, the primary role of the agricultural economics section is to render advice on R&E priorities on the basis of assessing farmer needs.¹⁶ A selected farmer only supplies labour for cultivation of the demonstration plot and is allowed to keep the proceeds, which often amount to yields 50 per cent greater than normal. According to the general manager of the research centre, the results have been successful with significant rates of adoption of the recommended technologies.

v) *Human resource development plan (HRDP)*

There is no doubt that presently the country suffers from a shortage of the technical skills needed for agricultural development. With regard to agricultural research, the ARTP and the donors (after some negotiation) have agreed to a HRDP that is designed to radically upgrade the numbers and qualifications of scientific and technical staff working in agriculture-related research and development. This will be accomplished mainly through improving education facilities at the AUA (Alemaya). Under the scheme, 10 AUA staff will be given opportunity to acquire Ph.D. degrees through overseas training, MSc degree programmes will be shortened to two years (from the existing 3-5 years) by eliminating the research components of the existing programmes. There will also be increased hiring of foreign expatriate staff. In addition, research staff throughout the NARS will be offered a series of incentives including a 50 per cent raise in salary (compared to their counterparts in the civil service), improved sabbatical facilities, better living conditions and better laboratory facilities.

While these developments are perhaps understandable, the Review Team remains sceptical about whether this is really the right way to improve capacity-building for technological development in Ethiopian agriculture. The main worry is that the programme still smacks at

¹⁶ This contrasts with arguably the more commonly observed practice whereby agricultural economists spend the bulk of their time researching for publishable material.

centralized science-driven orientation. For example, the World Bank plans to focus MSc degree programme training solely on course work would appear to run counter to the diagnostic skills needed to understand the complexities of agro-ecological production requirements.¹⁷ Moreover, there is a real danger that once again the regions may lose-out in terms of training opportunities because of a built-in bias toward the centre. In one of the regional center, visited by the Review Team, for example, out of 30 or so professional staff none had a Ph.D. and only 7 had MSc degrees. Often, the problem is really one of communication and information flows. By the time the regional centre is made aware of available training opportunity-slots, most would have been filled up by those living in, or having close contact with, groups based in Addis Ababa. Finally, little mention is made of modern methods of decentralized training based on distance-learning techniques. These are often specially designed to promote *in situ* research-based learning, monitored and assisted by generic courses provided by central institutions. They are also a useful method of encouraging decentralized technological development. The fact that recent advances in educational technology of this type have not been addressed, even in principle, by the ARTP is one of the Review Team's concerns.

(vi) *Seed multiplication and fertilizer facilities*

In order to have a better understanding of the pattern of production and distribution essential agricultural inputs, the Review Team paid visits to the National Seed Industry Agency (NSIA) and the National Fertilizer Industry Agency (NFIA). Both are relatively recent establishments. The NSIA has been operational since 1995 and was established to propagate improved germplasm in Ethiopia. At present, however, its aims are mainly regulatory and is currently building laboratories for quality control of locally produced improved seed. About \$40 million [\$22 million IDA, \$6.6 million IFAD, \$11.4 million national Government] is being invested to finance the current upgrading activity and the World Bank hopes to seed 10 new companies by 2001. At present the Ethiopia Seed Enterprise (ESE), a parastatal, dominates production with around 20 per cent of the market while Pioneer, a small private firm, produces around 2 per cent (only maize). The remainder of the demand for seed is met through farmer (unimproved) seed production.

At present ESE operates by sub-contracting to local farmers to produce seeds. It then uses the regional bureaus to pass knowledge and seeds to farmers. There is clearly a possibility for greater local production but evidence from the field suggests that at present very little real capacity exists. In addition, there are marketing and transport problems. Finally the relatively low share of ESE is not so much a quality problem, as a lack of responsiveness to market demand. A final practical problem is the virtual absence of seed multiplication centres, an area where private enterprise could certainly play a role. NSIA, however, has been very helpful in the supply of equipment such as cold storage facilities to the regions.

¹⁷ This is now recognized as a fundamental issue of research policy although one that many international agencies have difficulty coming to terms with since they have been conditioned to think in terms of disciplinary agricultural science. The point is that so great are the complexities involved, that analysts need to have detailed field experience built directly into their diagnoses of agro-economic systems. It has been discovered that the World Bank plan to elide the research component has been rejected by the Government, a move the Review Team supports. However, there are also indications that key components such as agricultural economics and engineering may be at risk under the new system. This would not be supported by the Review Team. For a good introduction to this literature see, for example, Clark and Clay(1986), Hall and Clark (1995) and Hall and Nahdy (1999).

Similar conditions exist for fertilizers. The NFIA sees its current role very much in terms of regulation and administration of scarce foreign exchange for imports. Presently, indigenous production capacity does not exist although with hoped for FDI assistance there is no reason why indigenous production could not result.

(vii) *Research and development management*

The Review Team also investigated two broad aspects of science and technology governance with direct implications for agriculture. They first investigated how research and development activities in the agricultural sector will be managed over the ensuing period. Secondly, they investigated how effective the prevailing mechanisms to integrate technological factors into investment promotion are.

As far as the generic R&D system is concerned the position of EARO is pivotal. Since EARO has taken over from the now defunct IAR (March 1998), the arrangements are still evolving although clear trends are emerging. As has been seen, the old discipline-based funding policy [increasingly non-productive in every way] is being replaced with a new policy designed to create greater linkages with farmers and other stakeholders in the NARS. However, as with other sectoral arrangements [e.g. health, industry etc.] research management is mirrored by a corresponding specialization within the ESTC itself, where the latter plays a coordinating role. In the case of EARO slightly more control than normal appears to be exercised in the sense that the ESTC commissioner is himself the chair of the EARO Board although EARO was established by proclamation in 1998, stating EARO reports to the Prime Ministers Office.

The Review Team's impression from interview with the ESTC was that it still thinks of EARO as having primarily a science-driven mandate, the novelty being that before re-organization there was very little good science being produced by the NARS. Thus, although the system is to be de-centralized/regionalized, funding decisions will still be taken by EARO on the basis of good research proposals. The great danger here, of course, is that greater linkage moves may be a paper exercise without any changes from conventional NARS behaviour in reality. The reason for this are two-fold. First, EARO is under the direct control of the ESTC which takes an apparently traditional science driven view of R&D management. Secondly, however, the relatively strong focus on commodity research combined with the continued strong support being given to federal institutes and universities, will help create a science and technology system that is still conditioned in the old mode.

EARO, on the other hand, maintains that in practice it will have complete autonomy to manage its own operations, subject to overall guidelines emanating from the ESTC. However, given the prevailing "top down" monitoring and control procedures traditional to Ethiopia, there is scepticism on the part of the Review Team about how far in practice things will change. A second factor that may complicate the situation is that EARO funding will come from MEDAC, the body responsible for managing much of the economic reform programme in Ethiopia, including more importantly, the approval for and monitoring of foreign aid. Presently, EARO maintains that although its annual funding will come from MEDAC as part of normal operations, once the broad parameters have been approved, EARO will have considerable powers to vary budgets to reflect evolving situations on the ground. Hence EARO will provide a budget for higher approval and after

modifications this will be mainly a parametric budget. Moreover, since EARO is committed to the changes, it will ensure that they will indeed take place as planned. Past experience of similar situations again suggests, however, that this may be an optimistic expectation.

However, despite EAROs autonomous aspirations, in practice, the net result may well be a science and technology agricultural infrastructure, which continues to operate in ways that suit the ambitions of its scientists rather than the needs of small farmers. EARO, itself a coordinating body, is to be managed by other coordinating bodies namely, ESTC, from a science and technology standpoint and MEDAC, from a financial and foreign aid standpoint. Hence it may well not be autonomous enough to fulfil its declared mandate in the face of powerful inertial forces. As a counterweight, there is of course the centrifugal thrust of regional control plus the apparent success of the new extension regime. However, this is an issue that needs to be carefully monitored over the next few years. Indeed, it may well be wise to build additional safeguards at this stage rather than risk the real possibility of a sensible strategy being compromised by institutional inertia.

More generally, the Review Team is concerned about the possibility of confusion arising from having different organs of governance involved in sectoral activity. It believes, as far as possible, the sectoral management body (e.g. EARO) should play the major role with other bodies (e.g. ESTC and MEDAC) playing a more strategic and advisory role. Indeed ESTC should consider emulating science councils in other parts of the world by moving toward a much more strategic level institutionally. It would therefore cease to get involved with sectoral considerations directly and instead deal with major cross-cutting themes bearing on science and technology development in Ethiopia.

C. Case Studies in Agricultural Development

Another important thrust of current policy is to diversify agriculture into higher value commodities (a position echoed by the World Bank 1997) in areas of great potential, especially in tea, coffee, cotton, sugar and horticulture. The Review Team carried out three case studies in order to give greater empirical content to these general points. Firstly it reviewed some recent developments in the textile sector through an investigation of a textile factory at Bahir Dar (see, Box 2), a town situated at the Southern end of Lake Tana some 450 kilometres north west of Addis Ababa. Bahir Dar was chosen as a place to visit for several reasons. It is the capital city of the Amhara State, one of the more advanced regional states in Ethiopia. In addition the region has apparently been designated as an important agro-business centre for future development. The textile plant at Bahir Dar is an old Government-owned and managed factory that was started in 1961 and is currently in the course of being privatized in collaboration with an overseas firm. Secondly, while the Review Team was in Bahir Dar it took the opportunity to review the activities of the local technical college. Thirdly a visit was made to the country's first "cut flower" business situated in Zewai, Oromo region. The cut-flower business has been operational over the past few years and was started by a local entrepreneur.

Each case study helps to illustrate potential, strengths, weaknesses, as well as opportunities that exist in Ethiopia for agri-business led industrialization, growth through export diversification, technological development and for attracting FDI into the agro-business sector, especially textile and horticulture.

(i) Textile

As part of its Integrated Programme for Ethiopia, UNIDO has proposed to assess the strengths and weaknesses of the textile sub-sector and the policy and incentive measures necessary to restructure and rehabilitate enterprises in the sector.¹⁸ It is envisaged that the review will identify ways in which the productivity of existing textile enterprises can be improved to make them competitive at national and international markets.

The production of textile goods is the largest formal sector manufacturing activity in Ethiopia. The textile sub-sector accounts for about 36 per cent of total manufacture in the country. Foreign capital played an important role in the establishment of most of the existing large-scale textile enterprises, which were subsequently nationalized following the socialist revolution in 1975. The main products manufactured in the Ethiopian textile and fiber industry are cotton fabrics, nylon fabrics, acrylic yarn, cotton yarn, woolen and waste cotton blankets, and sewing threads. The major inputs of the textile industry are cotton, nylon yarn, wool, acrylic yarn, jute fiber and chemical dyestuff. With the exception of some cotton and jute grown and supplied locally, a large portion of the major inputs required by the textile sector are imported. However, with liberalization and the growth of the private sector, an increasing proportion of the chemicals used by the sector is being produced and supplied by local enterprises.

The potential for growth and expansion of the sector is enormous. For instance, currently the capacity for cotton production is, by far, in excess of spinning capacity. This excess production capacity coupled with the availability of cheap labour in the country makes the textile sector of critical importance for export diversification, employment generation, attracting FDI and the growth of the manufacturing sector. But, before this potential is realized, efforts are required in easing the constraints faced by major enterprises in the sector. The efforts, to date, to privatize State owned textile enterprises have not been successful. Concerted and more targeted promotion efforts – for example, through fiscal incentives - are required to generate interest among domestic and foreign investors. Another potential incentive for the private sector investment is the preferential market access commitments made by bilateral and multilateral trading partners. The recent Everything But Arms (EBA) initiative of the European Union and the Africa Growth and Opportunity Act (AGOA) are important initiatives worth highlighting in this context. The immediate impact of these market access commitments is to remove trade and non-trade barriers facing exports from poorer countries such as Ethiopia and improve the export revenue earning capacities of these countries. One of the objectives of the proposed UNIDO assessment of the textile sector in Ethiopia should be to explore how the productive capacity of the sector can be enhanced to take advantage of the market opportunities offered by the EBA and AGOA initiatives.

The existing textile enterprises in Ethiopia face numerous constraints including outdated technologies and production capabilities, competition from imports, lack of experience in operating in competitive markets and skill shortages. The Bahir Dar Textile Factory, one of the largest and oldest textile plants in the country, symbolizes both the potentials and weaknesses of the textile

¹⁸ Hence, less attention is paid to textile in this review to avoid duplication. In addition, during the field mission to Ethiopia, the Review Team was requested to focus on the leather sub-sector as an example of agro-industries, which is included in chapter iv.

sector in Ethiopia. Information gathered during the field mission to the Bahir Dar textile factory (for details see Box 2) indicates the following:

- ◆ Lack of enterprise-level technological learning. The fact that, after nearly 40 years of operations, the enterprise still relies on imports for 90 per cent of its inputs such as chemicals and spare parts, clearly indicates a lack of technological learning. If this experience is repeated in the other Ethiopian large-scale textile enterprises, which all indications suggest it is, then the sector as a whole must be suffering from technological stagnation;
- ◆ Weak linkages. There are a number of private and public sector metal working enterprises and workshops that are capable of manufacturing many of the spare parts needed by the Bahir Dar plant. However, only on few occasions were these local enterprises used as suppliers (see box 2). The general tendency has remained to rely on imported inputs, thereby reducing the potential for stimulating technological learning in local enterprises through backward linkages;
- ◆ Low level of re-investment. The enterprise has invested very little in technological upgrading as demonstrated by the age of the machinery and equipment used. In fact, as noted in box 2, some of the machinery, in particular for dyeing and finishing, dates back to 1961, the year the plant was established;
- ◆ Low quality of products. Although the enterprise produces grey fabrics for export in regional markets, the bulk of its product (75 per cent) is geared toward the domestic market and is not export quality. In this respect, the enterprise seems to have remained locked into types of products and quality it was initially established to produce. This is another indicator of low-level of enterprise-learning;
- ◆ The difficulty of building competitive enterprises. The case of the Bahir Dar textile plant elucidates the challenge that Ethiopia faces in attempting to diversify exports, attract FDI and attain growth relying on enterprises that were set up under conditions of import substitution which have remained technologically stagnant. The current attempt to establish a partnership with a foreign enterprise, MCM of Italy (see box 2) is to be encouraged since such collaboration may help to improve quality and management style and upgrade the technology applied. But, ultimately, the technological development and competitiveness of such enterprises are determined by the linkages generated with other enterprises in the region, in particular, with component suppliers and with the Bahir Dar Technical College, the regional investment bureau at Bahir Dar and suppliers and consumers of raw materials in the region.

(ii) Learning institutions

Learning institutions are among the key actors in the effort to build national technological and innovative capability. In this connection, the case of the Bahir Dar Polytechnic is of interest since it elucidates the role that such an institute can play in strengthening the innovation system in one of the more advanced regions of Ethiopia. A brief summary of the institutional structure and pattern of development of polytechnics is presented in box 3. The key points arising can be summarized as follows:

- ◆ At present, the Government of Ethiopia is engaged in a thorough revision of higher education institutions, including the upgrading of technical colleges to the university level and their expansion to the regions. Moreover, as the case of the Bahir Dar Technical College shows, there is concerted effort to develop tertiary level training programmes that meet the technical skills requirements of local/regional industries. The establishment of a department on textiles and the focus of the technical college on engineering-related training programmes are compatible with the intention of the Government to turn the city and surrounding regions into a centre for agro-business-related activities. However, stronger links must be established between the technical college (to be upgraded to university level soon), and local/regional enterprises, especially those engaged in agro-business activities such as the textile plant at Bahir Dar;
- ◆ The culture of research, especially in areas in which the region has comparative advantages, and the student placement system should be strengthened and supported by both the regional and federal aims of Governments. As shown in box 3, these trends are emerging but require a systemic approach linked to policies for the development of the national and regional innovation systems;
- ◆ The Government has not implemented plans to introduce business education in Bahir Dar because, it argues, facilities for business-related education are already available in other regions. While regional specialization may have some merit in planning an education system, the Review Team believes that the absence of business education at the Bahir Dar Technical College is not productive. This absence goes against established evidence showing the integration of technical with business-related education such as management, accounting, marketing and finance is an essential requirement for the development of industrial management skills and capability. It increases the chance of promoting an entrepreneurial culture and is, therefore, more in keeping with the needs of a healthy national and regional innovation system. In Bahir Dar, the logical home for business management and related complementary subjects is in the department of industrial engineering, which at present focuses almost exclusively on standard engineering subjects like production scheduling and stock control.

(iii) Horticulture

The third case study - Meskel Flower Incorporated - is a successful cut flower exporting enterprise and demonstrates that a focus on horticulture business is indeed a realistic option for the country both in terms of attracting FDI and increasing domestic private sector involvement in this sector. The pattern of development of the enterprise is described in box 4. The lessons for export potential, increased FDI and the strengthening of the national innovation system arising from this case study can be summarized as follows:

- ◆ The key factors behind the establishment, survival and success of the enterprise seems to be the availability of relevant resources, especially land which was apparently obtained with little difficulty and without size restrictions, easy access to credit and some shrewd management innovations by the owner. These factors are encouraging since they signal that entry into horticulture business is a realistic and a

relatively easy option, especially for FDI. However, for other types of business, especially those located in larger cities such as Addis Ababa, access to land, both in terms of availability and cost, has proven to be difficult. Some local investors interviewed for this study indicated that it is one of the greatest obstacles to investment. It is clear that private sector concern about urban land needs to be given greater attention by the Government;

- ◆ The success of Meskel Flower Incorporated aside, the case study also demonstrates the constraints that new entrants into cut flower business are likely to face and in general, the obstacles that export-oriented enterprises face in Ethiopia. The main constraints are poor physical infrastructure, energy, transportation, the unavailability of a skilled labour force and the remaining bureaucratic procedures in acquiring essential inputs such as fertilizers, pesticides and herbicides;
- ◆ The role of technology also appears to have been significant in the following stages of development of the enterprise. First, the feasibility and technology choice stages required detailed work by the entrepreneur, including the availability and access to necessary technical data. National supporting institutions do not exist and consequently there is a lack of assistance in these areas. Therefore, the entrepreneur relies on technical assistance provided by a Kenya based organization, Agricultural Production Development Fund (APDF) and a foreign expert consultant. Second, continued technical assistance has been necessary to ensure a swift build up of design capacity. Third, technical training of the local labour force has been a necessary feature in the development of the business. However, local capacity for training in this area is limited and consequently, the enterprise was forced to hire a Kenyan horticulture expert. Finally, there seems to have been significant learning-by-doing on the part of the entrepreneur himself. In summing up, the success and experience of Meskel Flower Incorporated indicates that: (a) there is significant potential for investment in high value horticulture in Ethiopia; and (b) if the sector is to expand further (indeed since 1999 it has attracted additional local and foreign investment) then there is an urgent need for strengthening the national technological and innovation system and improving the support structure, especially physical infrastructure.

D. Investment Potential in the Agricultural Sector

Only 40 per cent of FDI inflows since liberalization has gone to the agricultural sector, although, as previously noted, agriculture contributes to over 50 per cent of GDP and accounts for over 80 per cent of aggregate merchandise exports. In formulating an investment promotion strategy, the potential role of agriculture needs to be given special attention. Equally important is the attention given to the Regional Investment Bureaus (RIBs) as they are likely to play a critical role in servicing inward investment in the agricultural sector and ensuring that investment continues. The strengthening of RIBs should, therefore, be an urgent priority in future investment policy and promotion plans.

While the Review Team was in Bahir Dar, it visited the Amhara Region Investment Bureau and conducted detailed discussions with high-level officials. Given that this region is one of the

most advanced of the ten regions in Ethiopia, a review of the Amhara RIB will help illustrate the potential and challenges facing similar bureaux in other regions.

The Amhara Region Investment Bureau began operations in 1992. It has approved over 350 projects, most of which are in agriculture and agro-business areas. However, the Amhara RIB currently faces a number of constraints, which require immediate attention in order to stimulate additional investment. The main constraints are:

- ◆ Shortage of trained staff. To provide the technical expertise and assistance required by potential entrepreneurs and to assess investment opportunities in the region. At present the office only has 21 technical staff, none of whom are engineers. This is a big gap especially in view of the technical support that the Bureau wishes to provide;
- ◆ Laboratory facilities. To conduct research needed by potential entrepreneurs (e.g. soil testing, water quality monitoring etc.). When asked if the Bahir Dar Polytechnic could assist in these areas, the interviewee expressed reservation as the Polytechnic is funded centrally;¹⁹
- ◆ The need for better computer and IT facilities;
- ◆ Although, in general, relations with the EIA (to whom the Bureau reports quarterly) are good, there are some problems nevertheless. For example it was claimed that there was no consultation on the last (June 1998) amendments to Investment Proclamation. Moreover, regional staff are overlooked for international trips for training or to make contact with prospective FDI business. Apparently, these tend to be open only to centre staff at Addis. There is also lack of opportunity to discuss at regular forums with other national stakeholders in Ethiopia.

More generally and despite the great potential that exists in the region for agriculture and agro-business, there are a number of pressing regional constraints. These are:

- ◆ Power shortages. It is estimated that the additional 75 megawatts at Tiss Abbay will not be on stream for another 3 - 5 years. Current capacity is 12 megawatts);
- ◆ Road transportation is poor;
- ◆ There is a significant market problem for agri-business (e.g. lack better information support);
- ◆ There should be greater technical capacity in EIA to help attract more FDI to the region.

¹⁹ The interviewee was not aware of the imminent cost-sharing policy of the Government. See Ministry Of Education (1998), p. 9-10.

Overall Assessment

Regarding agricultural reform, the Review Team believes that the shift toward regionalization and privatization have been the right decisions. The former should clearly lead to improved resource and technological management across the board if only because it will help to bring chains of command and control into more horizontal relationships. Evidence from regional research and development centres shows that this strategy already appears to be working though it is still early days. The great advantage of privatization is that it liberates entrepreneurs (and potential entrepreneurs) from the heavy hand of bureaucracy. More importantly perhaps, it creates possibilities for greater degrees of foreign direct investment (FDI) which in turn provides potential access to two necessary ingredients, namely international markets and best practice technology. FDI is not of course the only route to these ingredients but its importance has been recognized by the Government and steps are being taken to promote it. Equally important, is the determination to bring poor farmers into direct contact with the agricultural research system. Already, there are some indications of its practical success.

Therefore, at a general level, the Review Team believes that the right strategy for agricultural R&D is being followed. The problem is that such a strategy also requires corresponding institutional changes if it is to be effective. Here much remains to be done. The Review Team came across many examples gleaned from interviews as well as from independent observation of lack of communication and interaction between the different institutions dealing with technical change.²⁰ This indicates that chains of command are still very much "top down" with corresponding reluctance to link across hierarchies. Moreover, there may still be a tendency to regulate rather than facilitate while funding structures within the public services still depend upon central control in many aspects.

A second major reservation is that while there are many statements about making the agricultural research system, NARS, more user friendly and less science driven than is perhaps common in many developing countries, the reality of what could happen may well be less positive. Thus, the continued existence of the commodity R&D focus, combined with vague statements about "orchestration", the disproportionate focus on the central region and the rather traditional orientation of the Human Resource Development elements of the ARTP package, all suggest that NARS behaviour may not vary much in practice from the conventional (and discredited) stereotype. However, because so much of what is happening in Ethiopia has only recently been put in place (and therefore probably needs time to work itself out) the policy recommendations that follow at the end of this report are more in the nature of general suggestions (to help achieve stated goals) than specific injunctions.

²⁰ For example, there appears to be little interaction between education/research bodies and those responsible for foreign investment. Even among departments connected with investment, there was sometimes lack of awareness.

Box III.1: The Role of the Private Sector in Agricultural Development:
Examples from Colombia and India

The first example examines the role of trade associations in integrating technological resources with other inputs needed to bring about change in a sector or sub-sector. The Colombian experience explains this very well. In three sectors of direct relevance to agriculture (coffee, sugar and cut flowers) a recent UNCTAD report shows that a major role has been played by the relevant trade associations (or gremios). Acting on behalf of and financed by the growers, these organizations provided infrastructure, extension advice, training, R&D, legal and other services. Not only are such inputs superior to conventional public sector variety (often the latter do not exist), but they are also responsive to immediate perceived needs which are facilitated by close linkages. In this case they have clearly been effective and paradoxically appear to take pressure off the public sector, that allows the main R&D institutions to take a more strategic position in technological development.*

The second example draws on the role of cooperative institutions. Here recent developments in the mango sub-sector of the Indian economy involving an institutional marketing innovation, the Vijaya Association of Fruit and Vegetable Growers' Cooperative Societies of Andhra Pradesh (Vijaya) are equally illustrative. What Vijaya has done is to act as a means of integrating small farmers into a wider economic market (including the high value export market) through a cooperative purchase scheme that eliminate the middlemen. However, it has also, improved access to other inputs, in particular potential source of technology. Historically, organized agricultural science has found small farmers notoriously difficult to service in terms of their technology needs due to the often highly specific nature of their production problems and complexity of the factors which condition their technology adoption behaviour.** This problem has been heightened in the case of Indian horticulture due to the almost total lack of a dedicated extension system. At the same time it seems likely that private firms will still need to rely on small farmers for produce due to current land tenure arrangements. In turn this may provide an incentive for corporate enterprises to act as "technology brokers" for their producers, with all the up-stream implications that this has for horticultural science.***

* See UNCTAD (1999)

** See for example Biggs and Clay (1981)

*** See Hall et al. (1998).

Box III. 2: The Bahir Dar Textile Factory

The Bahir Dar Textile Factory is one of 6 large national Ethiopian textile factories. It was established in 1961 as part of an import substitution industrialization programme. It produces grey fabrics for export (25 per cent) and bed sheets for the local market (75 per cent) and employs around 2,500 people. Its overall production capacity is around 19 million square meters of cloth. It buys ginned cotton medium grade from local sources and then carries out the complete range of operations from cleaning, carding, roving, spinning, weaving through to dyeing and finishing. There is no shortage of local cotton of the necessary quality. It is of a medium-fibre variety from the northern part of the country.

Currently the plant operates at around 60 per cent capacity, which is an improvement from the pre-liberalization period. Since 1992 Ethiopian textile factories have been in competition with each other as well as imported textile products. However, a new trend of cooperative agreement among them is emerging designed to keep down the price of ginned cotton (50 per cent of total costs) and other inputs (chemicals and spare parts). The latter are mostly imported (90 per cent) since local capacity is insufficient because of poor design, product quality and time delays. The Akaki Spare Parts & Hand Tools Factory and another small plastics factory in Addis Ababa are used to manufacture components but only to a very small extent. Labour costs are very low running at around \$2 per day. The plant is old and gives the appearance of needing upgrading. Indeed some of the equipment (dyeing and finishing machinery mainly) dates back to the factory's foundation in 1961. There has been some re-investment (and expansion) in spinning and weaving in 1982 and 1988, funded by the European Investment Bank (EIB), but much needs to be done if the plant is to compete internationally. There is no meaningful R&D.

As part of the Government's privatization policy the Bahir Dar Textile Factory, one of the oldest in Ethiopia, was put out to private tender in 1992. There were no offers (as with the other factories) and it was decided that a process of partial rehabilitation would be necessary for the whole textile sector. This would include a search for foreign investors which could provide technical and managerial know-how. An Italian company, MCM, was approached but it has only been willing to enter into a management contract in the first instance to produce denim cloth. In the meantime there have been a series of consultants from the EIB to the Bahir Dar Textile Factory leading to a plan to upgrade the finishing sections with financial support from the EIB worth \$15 million.

The MCM joint-venture plan was to convert the plant to manufacture denim fabrics (and eventually garments as well) for export to the United States and European markets [an unspecified tie-up with Levi's was mentioned]. Production of bed sheets for the local market could still continue (20 per cent of total output by value). A team from MCM recently visited and final agreement should be concluded quite soon. The Government hopes that MCM will take out some equity participation soon and so enable a debt-equity swap.

Box III.3: The Bahir Dar Polytechnic Institute

The Bahir Dar Polytechnic Institute is in the process of being upgraded from a technical college to technological university status as part of a more general restructuring of the Ethiopian educational programme (6 colleges altogether) to produce more and better technological manpower in the country.

The Bahir Dar Polytechnic Institute now has the following 6 major departments: Textiles (the only one in Ethiopia); Civil; Mechanical; Chemical; Electrical; Industrial.

There are also a number of ancillary departments such as Continuing Education and the Ethiopia Management Development Centre (EMDC) discussed below. The new regime is three years old and the first cohort of students is now in the third year of a 5-year degree programme. Special attention is being paid to industrial placements. At the end of this semester, for example, all third year textiles students will be sent for project placement to a textiles factory, whether in Bahir Dar or in the many others around the country. Other departments will place students in sugar, foundry, beer, cotton ginning, food processing and soft drinks factories.

At present, the college faces a number of constraints. Staff recruitment is difficult, especially at senior levels where consultancy possibilities in Addis Ababa act as a disincentive. This is being met partially by recruitment from other developing countries but experience here has been mixed. Also, the establishment of an academic research culture is difficult to instill since there is no research tradition at the institution. However, this is being pursued through a number of "link" programmes with overseas universities, combined with a series of project proposals to donors. These are intended to focus on Lake Tana as key resource that is environmentally vulnerable and designed to combine inputs from a number of the polytechnic departments. In the Review Team's view this is a positive development and already there are encouraging signs that research funding could well be forthcoming.

A major weakness of the Bahir Dar polytechnic, especially in view of its upgrading to a university level, is the shortage of relevant social science skills such as economics, business studies, accounting and industrial management which are relevant for developing and promoting an entrepreneurial culture. These are courses that would normally be expected in a fully fledged university. However, one remedial feature is the presence on campus of the Ethiopia Management Development Centre [EMDC]. This programme is one designed by the Open University [OU] in the United Kingdom and operates on a cascading distance learning basis. It started around 4 years ago with the OU training around 40 tutors for 5 regions in Ethiopia. These now operate from 5 regional centres training people from a variety of areas (e.g. industry and local government) on a part-time basis in management development to certificate and diploma level.

A final point worth mentioning concerns financial control. At present this conforms to a centralized system with resources coming in from Government and being managed under a system that requires central polytechnic authority for the sanctioning of even the smallest expenditures. It is unlikely that a modern university can continue to operate under this sort of procedure. Indeed in most northern countries knowledge-based institutions now use budgetary control procedures that are much more decentralized (and much more efficient). Researchers not only formulate their budgets as part of their research proposals, they also manage these same budgets subject to generic rules laid down by the institution as a whole.

Box 4:
Meskel Flower Incorporated

The Review Team visited this plant as an example of domestic private sector participation in an area of agribusiness that could prove promising in years to come. Already this industry has made great economic strides in Kenya. Following an interview with the firm's managing director in Addis Ababa the Team travelled some 140 kilometres south to visit production operations at Lake Zewai. The origin of the enterprise was a decision by the entrepreneur, a former airline pilot, in 1992. He had been planning to enter some business activity for a considerable period of time dating back to his days *as an undergraduate* in California. While in the United States he had visited farmers, discussed possibilities with appropriate personnel in the World Bank, Washington DC and also visited facilities in The Netherlands.

Having made a decision to enter cut flower production his next task was to search for a suitable location in terms of soil, climate and ground water availability. He was assisted in this by having access to a detailed soil map of Ethiopia developed by the technical assistance of the Democratic People's Republic Korea. Finally he approached the organization sponsored by the World Bank based in Nairobi, Agricultural Production Development *Facility* (APDF). This body assists potential African entrepreneurs by securing technical assistance and helping to conduct feasibility studies. In this case he was put in touch with a consultant [John Wright] who is a well-known expert in the African cut flower business and travels all over the region offering technical advice. The consultant not only helped in the start-up phase but continues to visit *on a monthly basis* to help monitor production operations.

The entrepreneur was successful in leasing land and indeed claims that land availability for expansion in the Oromo region is not a problem. This was confirmed visually by the Review Team. The capital required to start the business was obtained from local banks. Production started with summer flowers for the Dutch market. However, he was, apparently in direct competition with a large Dutch company and was driven out when they lowered their prices. Nevertheless the entrepreneur asserts the experience was invaluable because by then he had acquired a great deal of commercial know-how and had discovered that there was/is a good market for high value roses in Germany. Germany was also suitable because Frankfurt is only some 7 hours flying time from Addis Ababa [Lufthansa] and he was able to tie up with a German marketing organization that was willing to take as many roses as he could send. Accordingly he abandoned the Dutch market, raised some extra money from a local bank and expanded the area of cultivation to 3 hectares and is now in the second year of the new operation.

The plant uses drip irrigation technology supported by fertilizer (and where necessary herbicide and pesticide) application, with regular monitoring of humidity and temperature to help optimize growing conditions. These are not computerized but could be if it were felt necessary. There are cold storage facilities both at the plant and in Addis. Energy at the plant is provided by two diesel generators that operate on a shared rota basis. The firm has two bulk carriers (more than enough for transport needs) and approximately 3 to 4 deliveries are made to Germany each week, with a stop-off in Addis where necessary. Quality control, packing and transportation scheduling are managed in a large open plan hanger-like shed abutted by the cold store. Packing staffs are organized into teams with performance chalked up on a large blackboard in full view of everyone. Relative performance is thus openly available and financial rewards are given to the more successful teams. Quality control procedures are strict because of marketing needs and rejected flowers are sold at a lower price in the Addis market.

Employment runs at around 70 labouring staff controlled by a production manager who is himself supervised by a consultant brought in from Kenya on a two year training contract. It was difficult to obtain accurate data on output and sales partly because the plant is still building up to full capacity. However, the Review Team estimates that at full capacity the plant will produce some 500,000 stems per annum at an average wholesale price of around 1DM for every three stems. This price varies widely depending on market conditions in Germany but it is clear that the plant makes a healthy profit whatever the estimate. As a sideline the plant produces a small range of summer flowers and some high value vegetables for local markets.

As mentioned above it is clear that there could be considerable expansion in this sector, mainly for the export market. The constraints faced are really threefold. First there is a relative shortage of aircraft freight space. The managing director estimates that existing freight capacity could probably cope with another Ethiopian grower but not with a third. A second problem is availability of fertilizers, pesticides and herbicides where the regulatory procedures, he believes, are bureaucratic both with regard to the acquisition of foreign exchange (there is no local production) and with plant protection regulations. In the case of the latter, licenses are subject to vetting by a national research laboratory but the managing director doubts the scientific expertise of the staff involved. Luckily there has been no significant disease problem so far but when the time comes to re-order chemicals he anticipates long delays. Finally road transportation is a problem because of poor road surfaces between the plant and the main Addis Ababa road and on the feeder road between the plant and the main road. In the latter case the distance is only a few kilometres but the time taken is nearly half an hour. Plans have been made to improve matters but these may take some time to reach fruition.

Chapter IV

The Leather Sector

Introduction

Ethiopia's leather industry is in the forefront of the leather sector development within the Eastern and Southern African region. As a predominantly agricultural economy with the largest cattle population in Africa, Ethiopia has a strong base for semi-processed leather, finished leather and leather products. It is no surprise, therefore, that the recent export development strategy introduced by the Government recently has singled out this sector as a priority area and incentive schemes have been designed accordingly. However, the challenge is how to make best use of the country's revealed comparative advantage to build a dynamic and competitive sector that contributes to Ethiopia's economic growth and the efforts to promote technological capability building through increased investment including FDI.

Ethiopia has great potential for rapid development of its leather sector and has focussed its short-term strategy on moving all leather production from the wet-blue stage to crust and eventually to finished leather. The strategy for the long-term is to gradually convert all available hides and skins to finished leather products – shoe uppers, shoes, jackets, bags, etc.

The rapid development of any sector depends on similar growth in all related sub-sectors and the infrastructure necessary in order to sustain the momentum of expansion. The recent development in Ethiopia, both in terms of political and policy environment is conducive to the development of the sector. However, its success depends on the ability of sector enterprises to have access to good quality raw hides and skins and to favourable export market conditions. This is especially important in light of the radical changes in the political and market environment in Eastern Europe, which was traditionally the main source of demand for Ethiopian leather products.

The success of the sector also depends, to a certain degree, on the strength and competitive position of the leather and leather products sector in other African countries, which are also endowed with the resources necessary to build a dynamic leather-based industry. Some Eastern and Southern African countries have the potential to emerge as major suppliers of semi-processed leather to export markets, and to produce finished leather products for domestic and gradually export markets.

Therefore, in designing policies to promote the leather sector, policy-makers in Ethiopia should take full account of the various factors that affect the competitiveness of products in the sector, including competition from other countries in the region. Markets for leather goods have increasingly become more fragmented because of more variety and unique lifestyle-related products which are in demand. Each product, such as various sports, leisure and safety products, requires design skills, knowledge and technology and special distribution channels. In fact, increasingly flexible specialization modes of production are necessary to cope with rapidly changing market requirements. The fashion and business cycle in most market segments is now shorter. Greater use of leather substitutes is also becoming common. In addition, tighter delivery schedules and shorter production runs are the order of the day, because of the need to reduce costs and risks of maintaining

inventory. These mentioned factors should be reflected in the strategy for building a dynamic leathersector.

A. The Value Chain in the Leather Goods Industry of Ethiopia

Three main stages in the chain of production of finished leather goods can be identified: (i) the supply of raw materials (livestock); (ii) tanning and finishing; and (iii) leather products manufacture.

(i) The Ethiopian livestock base

Ethiopia has the largest livestock population in Africa and therefore, has a strong base upon which its leather industry is founded. Estimates of the domestic livestock population is shown in table IV.1.

Ethiopian highland sheepskins, estimated to comprise about 70 per cent of the total sheepskin production, have an international reputation for their unique natural substance of thickness, fineness, flexibility, strength and compactness of texture. They are suitable for the production of high quality leather dress gowns, sport gloves and garments and are in great demand in the world market.²¹

Goat skins, classified as Bati-genuine (the international name given for high quality goat skins) and Bati type, are characterized by thick, highly flexible and clean inner surfaces and are in high demand for the production of fashion leathers.

(a) Marketing of sheep and goat skins

The existing hides and skins marketing system in Ethiopia, with its extensive network of traders and sub-agents, has worked well and has largely been unaffected by Government intervention over the years. It is estimated that the system recovers over 90 per cent of the sheepskins and about 60-70 per cent of the goatskins produced in the country.

Although, hides and skins are a by-product of the meat industry, they are a major export commodity, ranking second only to coffee and contributing about 14-16 per cent of the total foreign exchange earning.

The establishment of the Livestock and Meat Board in 1964, and the introduction of an array of legislation since 1973, relating to standards for raw hides and skins and procedures on licensing of hides and skins production and trade, inspection of premises, and product grading has considerably improved the volume and quality of hides and skins. There are now 60 municipal slaughterhouses and associated hide drying sheds. With the assistance of multilateral agencies,²² local skills and capabilities have been improved through training, educational study tours, seminars and workshops, construction of demonstration slaughter slabs and drying sheds, introduction of quality grading and grade-marking system, distribution of demonstration equipment and tools including appropriate

²¹ Eastern and Southern Africa Leather Industries Association (ESALIA, 1996).

²² The agencies that contributed to human resource development included UNIDO and FAO/TCP.

types of knives and enhancement of staff mobility through the provision of motorcycles and vehicles.²³

(b) Hides and skins pricing and quality grades

In Ethiopia, the prices of hides and skins are determined by the market. Moreover, although large-scale and more organized distributors have begun to emerge, the bulk of the hides and skins originate from rural farmers/primary producers. The latter supply about 70 per cent of the hides, and 90 per cent of sheep and goat skins to the industry. This has important policy implications. It implies, for example, that policies to improve quality at this stage must be directed at small rural farmers who are the predominant source of raw hides and skins.

The marketing chain for the hides and skins trade is principally from the primary producer (rural farmer and pastoralist) to rural markets; to small dealers and agents/collectors; to town traders and shed owners (where the hides and skins are frame-dried and/or wet-salted), to the big traders in Addis Ababa (the central market) and finally to the tanneries. The hides and skins produced in slaughterhouses and abattoirs are auctioned to big traders and tanneries, both public and private.

The lack of price incentives for the primary producer, illegal cross-border trade and competition from rural tanners are some impediments to the improvement of hides and skins in the collection and quality. In addition, defects like flay-cuts, putrefaction, improper shape, branding, scratches, diseases and parasites, as well as storage and transport conditions, down-grade the quality of the raw material supplied.

The low quality "Caravan" grade hides and skins, which was the standard before the establishment of the Livestock and Meat Board, was upgraded to "Butchery" type frame-dried hides, wet-salted sheep skins and wire-dried goat skins. The common practice in the hides and skins trade and in the issuance of movement permits from production centres to the central market has been to accord the product the traditional 40:50:10 grade mix of grades 1:2 and 3 respectively. In recent years, especially during the full operation of the Second Livestock Development Project, the quality grades reached 70:20:20 mix. Moreover, a large number of slaughterhouses and drying sheds were established and the participation of Farmers Producers Cooperatives in the production and marketing of hides and skins from the rural areas was increased. These measures have contributed to the general improvement in the quality of hides and skins.

To sum up, upgrading the quality of hides and skins in Ethiopia will require concrete measures aimed at specific problems currently facing the industry. Problems include: (i) lack of an effective programme to promote improved animal husbandry practices (which will reduce animal diseases such as "Ekek"); (ii) lack of proper slaughtering facilities (which will reduce defects and poor handling and poor preservation); (iii) lack of a proper collection system based on quality (introduction of a grading system) and incentive schemes for the primary producers, for example, the

²³ The assistance provided such as "A Procurement System for Ethiopian Hides and Skins Based on Quality" (Moriarty 1996) and "Improvement in the Quality of Ethiopian Rawstock" (Stosic, 1996), included the funding of studies dealing with the identification of the causal agent of the sheep skins disease ("Ekek") affecting the quality of Ethiopian sheepskins.

introduction of a proper pricing structure aimed at encouraging producers; and (iv) lack of reliable information on livestock upon which reliable sector policy guidelines and investment decisions can be made.

(ii) *The tanning sector*

The tanning industry in Ethiopia was started by an Armenian entrepreneur in 1926. For approximately 60 years, there were just six tanneries. After nationalizing of existing private tanneries in 1975, expansion took place, although at the same time, the export of raw hides and skins was banned. This led to the processing of hides and skins pickle and wet blue for export followed by, inevitably, processing to crust.

There are now some 16 tanneries in operation, four of which are state-controlled and the remaining under private ownership. In addition to these 16, there are six more tanneries at the project level or complete but not yet in operation. Four of the state-controlled tanneries namely, Ethiopia Tannery, Modjo Tannery, Kombolcha Tannery and Addis Ababa Tannery, are currently for offer under privatization and have a capacity between them of approximately 4,000 hides and 30,000 skins per day. Ethiopia Tannery is one of the largest tanning plants in the country with a total daily capacity of around 1,200 hides and 12,000 skins.

Two tanneries previously under state control, Awash Tannery and Ethiopian Pickling, are now part of the Ethiopian Leather Industries Corporation (ELICO) group which comprises the two ex-state tanneries and the new, but not yet operating, Akaki Modern Tannery in Addis Ababa. ELICO also controls the Universal Leather Articles Factory which produces bags, cases, garments and stitched upholstery.

The ELICO group has a current capacity of approximately 20,000 skins and 700 hides a day. This capacity will easily be doubled when Akaki Modern Tannery becomes operational. The other privately owned tanneries include Dire Tannery with a capacity of 6,000 skins and 600 hides daily and production of finished leather; Wallia Tannery with similar capacity as well as crust and some finishing; Blue Nile Tannery, established in 1992, produces approximately 30,000 pickled sheepskins and 1,000 wet blue goats a day, mainly for export. There are also other small- to medium-size private tanneries such as Showa in Modjo, Dessie Tannery, HAFDE in Sebeta, Davimpex and Abbay Tannery in Bahir Dar, Hora Tannery in Debre Zeit and Mersa Tannery in Mersa/Wollo. In addition, there are several projects for new tanneries at Debre Zeit, Debre Berhane, Kaliti and Sheba Tannery in Tigray. In line with the objective of moving toward production of finished leather, the treatment of effluent is being addressed seriously by most tanneries. Tanneries are now obligated to have a permit stating that a fully equipped treatment plant is in use.

(iii) *The footwear and leather products sub-sector*

Until recently, state-owned leather products enterprises were largely controlled by the National Leather and Shoe Corporation (NLSC), which administered six shoe manufacturing enterprises and one leather goods producing enterprise. In addition, there were several private sector workshops manufacturing leather products. The leather product lines produced include leather

shoes, shoe uppers, leather garments, bags and stitched upholstery. Through joint ventures and other contractual arrangements, further rapid progress is expected.

The Ethiopian leather industry initially developed in the context of an import-substitution programme and was highly protected from import competition, particularly in the leather footwear products for the domestic market. This policy has enabled the sub-sector to expand rapidly although at the expense of paying scant attention to quality considerations. The sector has diversified into the production of shoe components and auxiliaries. At present, for example, there are five sole and four lace manufacturing enterprises in the country, at least two of them capable of competing in the regional and international markets. Currently, only a small proportion of the leather products manufactured in Ethiopia is exported. In the past, leather products were exported to East European countries under special trade pacts arranged by the former socialist Government of Ethiopia.

This report has identified, albeit briefly, the value chain in the production process of leather products in Ethiopia. Such an approach may assist in mapping out the key stages in the production process, identify possible constraints or bottlenecks and policy and incentive measures as well as the institutional support system necessary to build a dynamic, highly integrated and competitive sector. From the analysis, it is clear that policies to promote the sector must start at the raw materials (hides and skins) stage and with small rural households who supply the bulk of these products to small traders. Policies dealing with product standards and grades, prices, the prevention of livestock disease (such as "Ekek") and other damage to hides and skins, and training in appropriate methods of slaughtering and drying hides and skins must be formulated and implemented effectively. At present, policy interventions have tended to focus on the second stage of the process, particularly tanning and the production of finished goods. Although, commendable it should be noted that the efficiency, competitiveness and growth of the sector as a whole will be assured only if measures are taken to deal with problems across the various stages of the value chain.

B. Strengths, Challenges, Opportunities and Constraints.

From field visits to five tanneries, ten leather goods/garments manufacturers and two footwear manufacturers, the following constraints have been identified:

- ◆ Most enterprises, especially State-owned enterprises, are currently faced with profitability, cash-flow and indebtedness problems, partly due to high interest rates;
- ◆ Major innovation related problems are linked to production, process control and lay-out and excess production capacity, particularly among tanneries. The existence of over capacity creates fierce competition for raw material with implications for price and the quality of raw materials demanded;
- ◆ Firms using local raw materials have difficulty exporting owing to poor manufacturing capability;
- ◆ There is little sign of formal R&D within enterprises, however, there are clear signs of innovative activities in some firms, notably with respect to product development;
- ◆ None of the enterprises visited had been ISO 9000 certified and in some cases, did not even know of its existence. In addition very few enterprises were aware of the existence of the Quality and Standards Authority of Ethiopia. In light of this, creating awareness of existing support structure is an urgent task.

C. Support Systems for Investment and Innovation

As noted in the introduction to this report, learning and improvement in technical capability by firms does not take place in isolation but in interaction with support institutions and other firms. This section identifies the major national actors that influence the development of the leather and leather products industry. Coordination of support services provided by these entities and continuous interaction between them and enterprises are prerequisites for the development of the sector and acquisition of innovative capabilities.

(i) *The Ministry of Agriculture (MOA)*

Until 1999, the MOA coordinated all hides and skins improvement activities and the implementation of the Ethiopian standards for raw hides and skins. Subsequently, the task of quality control and standards was transferred to the Ethiopian Livestock Marketing Authority (ELMA), which is an independent body established by the Government to oversee the marketing aspects of livestock and livestock products except quarantine services. Under the new decentralized forms of Government, hides and skins improvement activities have been delegated to the regions.

One of the most important activities is the implementation of the standards through certification carried out using an Ethiopian Standards Mark which indicates conformity with standards requirements. Any complaints against standards requirements needs to be submitted to the Quality and Standards Authority of Ethiopia (QSAE). Another important activity which was carried out by MOA was the provision of licensing rawhides and skins collectors through technical evaluation in conformity with the Ethiopian Standards. During field visits, it was observed that the Ethiopian Standards Authority (ESA) was not fully aware of how this activity was carried out.

In light of this confusion and lack of interactions and also in order to investigate the causes for the decline in the quality of raw hides and skins, a technical committee composed of tanners associations, MOA, Export Promotion Agency (EPA), ESA and 14 regional agriculture bureaus was established by the Prime Minister's Office. Subsequently, a report including a proposal for possible implementation of a control system for hides and skins quality was prepared in 1998. It was this committee which proposed the establishment of an authority for the development of raw hides and skins. The main objectives of this authority is to ensure that the purchasing of raw hides and skins is based on quality/grade, to promote the expansion of infrastructure, to train extension officers as well as collectors, traders and others who are directly or indirectly involved in the distribution of raw hides and skins.

The establishment of the new Authority may help improve the interaction between public sector agencies, responsible for ensuring high quality standards in the production of hides and skins. Horizontal linkages between MOA and ELMA, and QSAE and MOA and ESA is essential in order to inform policy makers of constraints that hinder the supply of high standard raw materials, essential for the production of finished leather products with higher value and export potential.

(ii) *The Ministry of Trade and Industry (MOTI)*

MOTI is responsible for the formulation of policies and incentive schemes aimed at enterprises in the productive sector. For example, it was responsible for the establishment of the Leather and Leather Products Training Development Institute (LLPTDI), demonstrating its sensitivity toward one of the major problems, namely, the lack of qualified manpower which continues to hinder the development of this sector.

It seems that interaction among the various actors dealing with implementation of incentive measures and investment promotion in the sector, namely, MOTI, EIA and ETA, is very strong and well coordinated. The most important role is played by MOTI in the privatization process of State-owned tanneries and leather products factories. EIA has also supported MOTI in the implementation of major investment incentives, such as customs import duties; exemptions from payment of export custom duties; income tax holidays; R&D Incentives; losses carried forward; and depreciation. All of the visited enterprises acknowledged the essential services produced by the EIA. Nevertheless, EIAs activities need be further strengthened in order to ensure benefits are widely shared among all enterprises in the sector.

(iii) *The Ethiopian Tanners Association (ETA)*

ETA was established in 1993 as a centre for leather quality, standards, environment, training, trade and to represent the interests of tanneries. Currently, the association has fourteen members. In practice, ETA essentially acts as a lobbying organization rather than a provider of real services. Moreover, small- and medium-sized enterprises (SMEs) feel that ETA mainly represents the interests of tanneries and large leather products manufacturers (footwear, leather goods and leather garments). However, the idea of an association to defend the interests of producers and establish links with external producers is a move in the right direction as it is likely to benefit all producers in the sector. ETA is already developing closer relations with overseas tanners. It has signed a memorandum of understanding on a project entitled the Implementation of the Hides and Skins Grading and Pricing Project with ESALIA. The project aims to overcome problems of quality of raw hides and skins. ETA will take a leading role in the implementation of this project. During 1997-1999, ETA played an active role in the organization of three international leather trade fair events held in Africa during 1997-1999. ETA is currently developing skins processing capacity in collaboration with Pittards PLC.

The establishment of ETA is a natural evolution of interactions already existing among the members of the dissolved NLSC. The greatest challenge facing ETA is represent the interests of the whole industry. The leather products manufacturers feel ETA is more oriented toward the support of tanneries. They therefore propose the establishment of an additional association that articulates their concerns. Cooperation with other international associations should be encouraged in order to obtain experience through interaction.

(iv) *The Quality and Standards Authority of Ethiopia (QSAE):*

The QSAE is the sole Government institute responsible for the formulation of national standards. This authority elaborates, monitors, supervises and controls the implementation of national standards. However, because the MOA has better infrastructure, skilled labour force and facilities for implementing national standards on raw hides and skins, the implementation of these standards tend to be delegated to the MOA. Presently, a mechanism for the follow-up of the implementation of the standards on raw hides and skins does not exist. Standards are basic requirements for quality control and certification activities. There are only two mandatory standards for leather products. They are: the raw hides and skins standards and the leather standards.

The Ethiopian Authority for Standardization (EAS) has a relatively well organized quality control laboratory with better facilities than the tanneries. In principle, samples are collected quarterly from licensed tanneries by the authority and tested as to whether they meet the requirements of the Ethiopian Standard with respect to leather products. However, in practice, due to the lack of skilled manpower, maintenance, transportation, follow up and periodic inspections, sample collection and testing are not performed regularly. Currently, measures are being taken by the authority to alleviate these problems. The types of laboratory services offered by the authority to tanneries are mainly in the areas of physical and chemical analysis.

In addition to QSAE, four tanneries, namely Awash, Modjo, Ethiopia and Addis Ababa have chemical and physical laboratories for testing semi-finished and finished leather products. In these laboratories, chemical tests such as sulphide content for liming liquor, moisture, ash and fat contents for tanned and finished leathers are determined. In the physical laboratory tests such as tensile strength, elongation at break, shrinkage temperature, thickness, double hole stitch tear strength (hole burst), flexible endurance, colour fastness, adhesive power for semi-finished and finished leather products are conducted. The rest of the tanneries are mainly engaged in the production of semi-finished leather mainly pickle sheep and wet blue goat skins and have lab instrument including pH meter, pH indicators, thermometers, and barko meters. Wallia Tannery and the recently established Mersa Tannery plan to produce finished leather products and to introduce chemical and physical testing laboratories.

It should be noted that the set standards are not always utilized effectively. The main reasons for the lack of adherence to standards are: (i) limited skill and experience of selectors; (ii) absence of forum to attain uniformity among selectors working in different tanneries; (iii) market influence; (iv) absence of strict follow-up and supervision; (v) absence or limited supporting facilities. It is of paramount importance to apply the standards if the Government strategy for the sector is to result in export growth. However, the standards for raw hides and skins and finished leather products need revision compatible with the current level of development on leather technology and quality demanded in the international market.

(v) *The Productivity Improvement Centre (PIC)*

There is a leather processing technology workshop as well as a footwear and leather goods training workshop at the Productivity Improvement Centre (PIC) of the Ethiopian Management Institute (EMI) in Addis Ababa. Both workshops at the centre are poorly equipped. The leather

processing workshop has been primarily engaged in training activities of raw hides and skins, quality improvement and leather processing technology. Training activities in the footwear section is limited to short-term operational training such as sewing. Due to the poor system of preventive maintenance and lack of spare parts, many of the machines and equipment at the centre are not functional or worn-out. There is a lack of R&D activity in the centre partly due to the fact that modern scientific testing and R&D facilities are non-existent. Very little effort has been made to modernize the training workshops, resulting in present standards falling below the initial stage. The centre has strong links with some enterprises in the sector and the MOA. Courses are mostly designed based on the needs of the client organizations.

As a self-sustaining enterprise, the centre has to cover all its costs from charges for the training service it provides. It is not subsidized by the Government as a promotional centre. As the prices charged tend to be expensive for some clients, there is a lack of demand for the training services of the centre from SMEs. With the establishment of the LLPTDI, it is strongly recommended that in the interest of the sector, the leather and leather products sections of PIC be integrated within the LLPTDI, in order to optimize the facilities and services offered by both institutes.

(vi) *The Leather and Leather Products Training Development Institute (LLPTDI):*

The main objective of the envisaged institute is to enhance the development of the leather industry through provision of training on various aspects of leather production in order to alleviate the problem of skill shortages in the leather sector. This will include theoretical and practical training in all aspects of leather manufacture, raw materials, chemical processes, mechanical operations, and quality control methods. Some of its more specific activities to be included are:

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

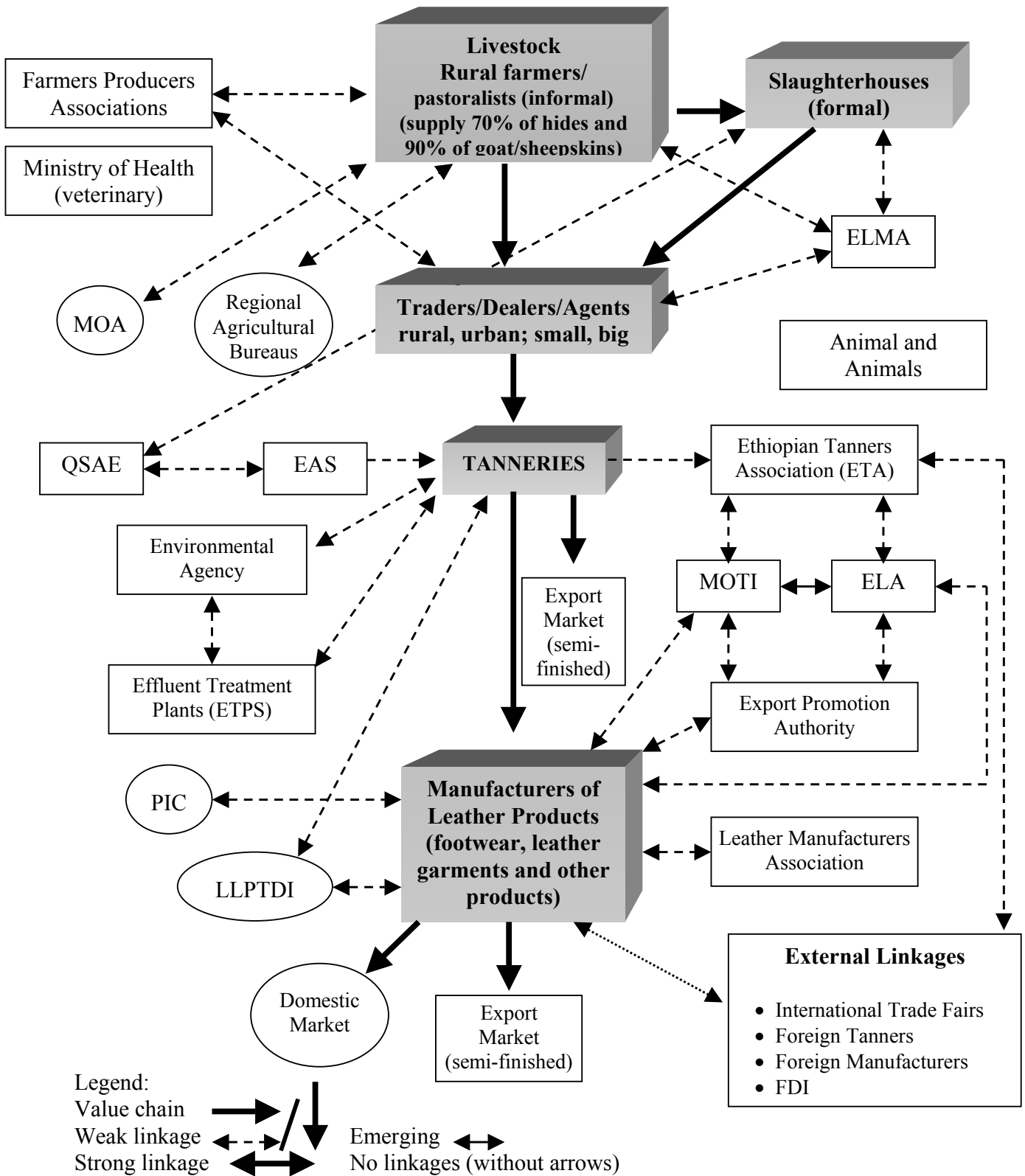
The success of this institute will depend on the extent to which it interacts with enterprises in the sector in generating a training programme and other services required by the enterprise. Assessing and monitoring the needs of enterprises is essential if the centre is to provide relevant services. In addition, if the centre is to be self-sustained, initial support from the State may be required in order to ensure that service fees, at least in the initial stages of the centre's development, are not prohibitive and discouraging. Paying for training or other productivity enhancing services is not common among Ethiopian enterprises, especially small-scale enterprises. Therefore, a grace period, until clients begin to appreciate the services, may be required before the institute begins to sustain itself.

Overall Assessment

From the above discussion, it is clear that concerted efforts are being made by the Government to promote leather and leather products related activities and to ensure that the sector plays a leading role in the Ethiopian economy. Some of the institutions that directly affect the development of the sector in Ethiopia have been identified above. This list is an indicative rather than exhaustive list. There are other private and public sector institutions, some of which have been discussed in other chapters of this report, that also affect the development and competitiveness of the sector. The overall findings of the institutional support system for the leather sector can be summarized as follows:

- (i) Some of the key institutions and support structures needed to foster a dynamic and competitive leather and leather products sector already exist;
- (ii) However, there are still gaps in the availability of certain specific services – due to poor equipment, lack of specific skills and knowledge about best practices;
- (iii) Some of these gaps could be resolved by existing support structures, but interaction between producers and support institutions is poor. There is little attempt to coordinate support services;
- (iv) In this respect, the establishment of a centralized authority for the development of hides and skins is timely, as it will help improve the problems associated with weak horizontal linkages. The supply of high quality hides and skins is still a problem and one of the weakest links in the industry's value chain. This constraint must be addressed urgently if the sector as a whole is to grow and contribute to the economy;
- (v) Ethiopia has been following a two-pronged strategy in revitalizing its leather sector. In the short-term it aims to move all leather production from the wet-blue stage to crust and finally to finished leather. In the long-term, it aims to convert gradually all available hides and skins to finished leather products. Effective implementation of these objectives will require that: (i) policies and support systems treat the sector in an integrated manner and ensure that improvements in quality and productivity take place across the industry's value chain. There is a tendency, at present, for policies and incentive structures to focus on leather products manufacturing in the hope that this will improve export performance. It should be noted, however, that higher value products can be manufactured only if the raw material used is also of higher quality; (ii) enterprises in the sector must be encouraged to build innovative capability which is now essential for competitiveness. The more innovative and dynamic the sector, the more likely it is to attract FDI and potential foreign partners.

Chart 1. Leather Sector: Value Chain and Existing Linkages to Support Institutions



Box IV. 1

Strengths, weaknesses, opportunities and challenges of the leather sector in Ethiopia

Sub-Sector	Strengths	Major Weakness	Opportunities/Challenges
Raw Material: hides and skins	The largest livestock population in Africa	<p>Poor quality: The majority of hides, although characterized by good grain and fibre structure, come from older draft animals and therefore suffer from diseases, branding and scratches. Almost all hides are suspension dried.</p> <p>Availability: irregular supply of raw materials pose a problem to the sub-sector, partly attributed to inaccessibility of some parts of the country during the recent conflict, livestock, smuggling to neighbouring countries and the retention of hides and skins in rural areas;</p>	<p>Hides and skins improvement is a long-term and continuous process. Now, with the decentralization of the extension services to regions it is hoped that these activities will prove to be more efficient.</p> <p>International organizations should continue to assist especially in the creation of awareness for this important commodity.</p> <p>In the region a new project is launched entitled "Raw Hides and Skins Grading and Pricing Systems in Eastern and Southern African Countries", in which Ethiopia is included.</p>
Tanning/ Finishing	<p>Fully-mechanized Tanning capacities exists.</p> <p>Exports of semi-finished leather (wet-blue/crust) already well established; some large tanneries (ELICO Group) already privatized.</p> <p>Development plan for expansion of the finished leather sector</p>	<p>Machinery equipment: old and obsolete equipment and lack of spare parts; lack of learning over the years; little new investment.</p> <p>Lack of sufficient production capacity for finished leather.</p> <p>Pollution control: insufficient environmental awareness and technologies for in-plant and end-of-pipe waste reduction and treatment solutions; monitoring and analysis capabilities and facilities; occupational health and safety practices knowledge.</p> <p>Lack of skilled man-power in the various stages of processing.</p> <p>Support services: Lack of adequate quality management to ensure competitiveness, inefficient domestic and foreign investment sub-sector; indicating weak linkages.</p> <p>Finance: lack of sufficient capital to carry out factory extensions and rehabilitation. In the case of the private sector, tannery production is constrained by chemical shortages as foreign exchange allocations have tended to favour parastatal tanneries.</p>	<p>The privatization programme is underway and is starting to show positive results.</p> <p>With assistance from international organizations increasingly strong process control and factory rehabilitation's are in place.</p> <p>The establishment of LLPTDI will assist the industry in training activities.</p> <p>The activities of EIA will possibly increase the number of potential foreign investors.</p> <p>International technical assistance in the area of pollution control. Installing awareness on tannery pollution and the necessity of installing cleaner technologies is a must.</p>
Leather Products	<p>Fully-mechanized Capacities exist.</p> <p>Experience in exports of footwear/leather goods and garments.</p>	<p>Lack of good quality finished leathers, components and other accessories.</p> <p>Machinery equipments,: old and obsolete and there is a lack of spare parts.</p> <p>Lack of skilled labour force.</p>	<p>The privatization programme is underway and is starting to show positive results.</p> <p>The establishment of LLPTDI will assist the industry in training activities.</p> <p>The activities of the EIA will possibly give a boost for potential foreign investors.</p>

	Large ELICO Group privatized. Product development plan used.	Finance: lack of sufficient capital. Marketing: poor design capabilities and international exposure. (absence of joint-ventures, other international linkages)	boost for potential foreign investors. Under a new UNIDO increase the integrated programme, it is expected that assistance will be provided for product development and marketing including participation in trade fairs.
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Source: UNIDO: Field work result

Table IV.1: Livestock in Ethiopia, 1998

Raw Material	Population 000 heads	Off-take Rate (kill rate)	Raw material 000 heads/skins	Production: 000 sq. ft.	Weight %
Cattle	29.450	6.5%	1.900	49.400	40.3%
Sheep	21.700	33.2%	7.200	46.800	38.2%
Goat	16.700	37.1%	6.200	26.350	21.5%

Source: (FAL, World Statistical Compendium for Raw Hides and Skins Leather and Footwear 1998).

CHAPTER V

Small- and Medium-sized Enterprises (SMEs)

Introduction

This chapter assesses the investment potential (domestic and foreign) and the capacity for technological learning and innovation in SMEs.²⁴ The focus is on the productive sectors, in particular SMEs in the manufacturing sector. Manufacturing SMEs make up the largest and the most important segment of the industrial sector in Ethiopia. In 1998, for example, SMEs contributed to 68 per cent of gross value of production and over 80 per cent of employment in the manufacturing sector. As will be shown below, SMEs, especially the latter, are among the most dynamic and innovative enterprises in the country. In reviewing the investment and technology policies of Ethiopia, therefore, it is pertinent that special attention is paid to the pattern of development and the strengths and weaknesses of SMEs in Ethiopia.

A. The Evolution of Manufacturing Activities in Ethiopia

Although Ethiopia has a long history of artisan manufacturing activity, the development of modern manufacturing enterprises took place mainly in the post World War II period. The evolution of the sector falls into three broad phases: the import-substitution period which lasted from the early 1950s to 1974; the centrally planned economic system from 1974/1975 to 1991; and liberalization and market-orientation since 1991. During the second period, private sector industrial activities, consisting mainly of SMEs, were openly discouraged through restrictive policies, including regulations and direct controls that prevented access to credit and imported inputs by private enterprises. Not surprisingly, therefore, during this phase, the number of officially registered small-scale manufacturing enterprises was reduced.

Since 1991, there has been significant improvement in the incentive system and the macro economic environment with positive implications for manufacturing activities. A liberal investment code has been introduced. Domestic price controls have been removed. The financial system has been partially liberalized. Tariffs have been reduced and non-tariff barriers have been removed. A public sector reform programme has also been introduced and one of its main objectives being to privatize SMEs that were nationalized in the 1970s.

All these reforms have immensely improved the domestic policy environment for SMEs. In fact, the Government has gone a step further in its support for small enterprises by formulating a National Micro and Small Enterprises (MSEs) Development and Promotion Strategy. This is an important beginning and should be followed by refinements of micro-policies and incentive schemes

²⁴ There is no universally accepted definition of small- and medium-sized enterprises. Usually, the turnover of the enterprise, number of persons employed or capital invested are used alternatively or in combination. In Ethiopia, there are not yet any legal definitions of SMEs. For example, the Development Bank of Ethiopia defines SMEs in terms of capital invested while the Ministry of Trade and Industry (MOTI) uses number of persons employed as the main criterion. For the purpose of this report, the employment criterion is used. Thus, small enterprises include those employing up to 20 persons and medium-scale between 20 and 100 persons.

aimed at promoting learning and technical change at the enterprise level. Some of these policies are identified below.

In the long run, the possibility for investment expansion and industrial growth in Ethiopia depends heavily on the country's ability to provide SMEs with the appropriate supporting institutions and an environment that fosters innovative activities. In many other developing countries, large enterprises are the outcome of the orderly development of SMEs. An example of this phenomenon is the shoe manufacturers in the Sinos Valley of Brazil.²⁵ Most of these manufacturers started as small-scale operators, clustering around a specific area to supply the local market. Currently, the Sinos Valley shoe manufacturers are leading players in shoe production and able to compete in international markets and respond to global challenges. The point here, is not to understate the real problems that SMEs frequently face in a developing country environment, but to highlight that while obstacles are many, there are possibilities for fostering dynamic and innovative SMEs that are competitive and attractive to domestic and foreign investment.

B. Method of Analysis

The analysis in this chapter is based on a survey of a sample of enterprises undertaken specifically for the purposes of this study. An illustration of some of the key features of the sample enterprises is presented in table V.1. A survey approach was preferred for two reasons. First, the data available on SMEs in Ethiopia is highly aggregated at the industrial or sectoral levels and limited both in terms of coverage and categorization of enterprises by size. Policy advice based on evidence derived from statistical generalizations and aggregated data tends to be, in most cases, misleading or irrelevant for the needs of targeted enterprises. Many of the nuances about SMEs and all the factors that induce path dependent types of behaviour will be missed. Second, information gathered at the firm level provides the opportunity to assess the perceptions of enterprise owners about their national investment climate and their attitude toward technological upgrading, innovation and competitiveness.

The survey included 20 enterprises engaged in the manufacture of chemical and plastics-related products, 15 in metal-working, 10 in textile and clothing, 13 in food processing and another 13 in leather and leather products. The majority (88 per cent) are private sector enterprises owned by domestic investors. The rest (12 per cent) are State owned. Small- and medium-scale businesses, especially in the manufacturing sector, have attracted very little of the FDI inflows Ethiopia in recent years. The tendency has been to concentrate on larger and more capital-intensive productive activities. This trend must not be allowed to continue given the critical role of SMEs in Ethiopia and the potential that exists for attracting FDI from foreign SMEs that target other SMEs in the host countries. The advantages of attracting FDI by multinational SMEs and how they can be targeted and attracted is discussed below.

Firms of all sizes are represented in the survey although, naturally, the main focus has been on the SMEs. The sample includes 27 small- and 35 medium-sized enterprises. In addition, for comparison purposes, 9 large-scale enterprises have been included. There is a high level of

²⁵ For a detailed analysis of the pattern of development of shoe manufacturing enterprises in Sinos Valley, Brazil, see Shmitz, H (1995).

geographic concentration of manufacturing activity in Ethiopia. Over 70 per cent of modern sector manufacturing activity is concentrated in the Capital city, Addis Ababa and the surrounding region, in particular along a 100 kilometre stretch between Addis Ababa and the town of Nazareth. The sample of enterprises selected for this study are located in this geographic region.

Table V.1
KEY FEATURES OF SAMPLE ENTERPRISES

	Chemicals	Food processing	Leather	Metal working	Textiles
Sectoral distribution	20	13	13	15	10
Size Distribution %					
Small	18.5	26	26	18.5	11.1
Medium	40	8.5	11.4	28.5	11.4
Large	11.1	33.3	22.2	-----	33.3
Mean size	48	49	50	38	163
Mean age (years)	12	13	7	15	21
Ownership %					
Private	90	77	92	100	70
Public	10	23	8	-----	30
Market Orientation (No. of Enterprises)					
Domestic					
Market	All	12	10	All	9
Export	-----	1	3	----	1

Source: Survey results

C. Investment and Innovation Potential and Constraints

The majority of SMEs in Ethiopia are now in private hands, mainly domestic private capital. Since the beginning of the privatization programme, a number of State-owned manufacturing SMEs have been privatized thereby reducing the involvement of the State in small- and medium-scale manufacturing activities. In terms of ownership structure, a high proportion of the private enterprises are sole proprietorships or family owned. This pattern of enterprise ownership has implications for investment, innovative capability-building and the implementation of industrial policy in general. In this connection two points should be noted.

First, sole proprietorship or family owned enterprises tend to be risk-averse. This aversion is understandable because business failure for owners of such enterprises is likely to have direct ramifications, such as losing their homes or other assets put forward as collateral. Therefore, taking a risk tends to be a big step for such enterprises. In fact, in this report, taking risks by investing in "new" management systems, or attracting foreign investment through partnership arrangements or

introducing production processes that are "new" to the firms themselves and their environment is regarded as innovative activity. Unfortunately, the number of SMEs in Ethiopia that qualify these criteria is not large, though sufficient enough to believe that with carefully designed policies and incentive measures and well-focused and coordinated support system, the number can be increased. In effect, therefore, the message for policy makers in Ethiopia is that more innovative and direct policies and approaches are needed in designing and implementing policies to stimulate investment and innovation in SMEs.

Second, typically, decision-making power in sole proprietorship and family owned enterprises tends to be highly centralized, usually in the hands of a single owner. The owners perceptions of policy intentions and market conditions determine the nature of response to policy. This has important implications for policy implementation, especially investment and innovation-related policies. Their effectiveness will depend among other things on how forcefully these policies are explained and transmitted to enterprise owners.

As noted above, FDI in small- or medium-scale activities are limited. However, there is great potential for FDI involvement in existing SMEs through partnership or subcontracting arrangements. Some of the enterprises interviewed stated, for example, that they were searching actively for potential partners in East Africa, the Middle East, Asia and Europe, to establish a partnerships allowing them to gain market access abroad and to learn from the partner through client-supplier relationships. A detailed interview was conducted with a manufacturer of machinery and equipment who was, at the time, in the process of negotiating with another enterprise in Greece to form a marketing and technology partnership. This case study illustrates the type of policy and attitude changes needed in Ethiopia in order to attract foreign investment and encourage innovation through external linkages.

The case in point involved a proposal for a partnership agreement between a small-scale Ethiopian enterprise and a Greek firm. The plan was for the Ethiopian firm to process and supply sesame seed as an input for the manufacture and marketing of biscuits in Greece. Eventually, in the long-run, the biscuits would be prepared in Ethiopia, where labour costs are much lower, with technical assistance from the Greek partner. The product would then be packaged and marketed by the Greek firm. This is a classic example of the type of external partnerships that Ethiopian SMEs can arrange and learn from by interacting with other SMEs or larger firms in other countries.

Inter-firm partnerships can be effective mechanisms for investment flows, technological learning, knowledge sharing, technology transfer, market access and the development of innovative capabilities.²⁶ However, the process of identifying and establishing contact with a potential foreign partner and then negotiating an appropriate partnership agreement is not an easy task, especially for small enterprises. In fact, at the time of the interview with the Ethiopian firm, the owner was preparing for his second trip to Greece to follow-up on his earlier visit which resulted in little progress. His negotiating plan was based on intuition and the determination to succeed in acquiring

²⁶ The role of inter-firm partnerships in technological capability-building and the general policy and economic environment conducive to inter-firm cooperations are examined in, UNCTAD, (1995), "Technological capability-building and technology partnership: field findings, country experience and programmes", (UNCTAD/DST/6), Geneva, Switzerland.

a partner abroad rather than a well prepared business plan backed by negotiating skills. Such efforts require public sector support because the cost of searching and following-up on potential foreign partners, be it for joint-venture investment, subcontracting arrangements or technology partnership, is prohibitive for most SMEs in general and small enterprises in particular. Associated problems include the whole process of finding information about potential partners, establishing contact, preparing and undertaking trips abroad, which can be difficult if, for example, access to visa permits are restrictive and finally approaching the potential partner and initiating negotiations. At present, in Ethiopia a mechanism for supporting enterprises seeking to establish inter-firm cooperation with a potential foreign partner does not exist.

The case of the firm trying to penetrate the Greek market and eventually the European market helps illustrate the strengths and weaknesses of the current policy environment and its impact on the private sector. It would have been unimaginable barely ten years ago for an owner of a small business in Ethiopia to initiate, without State involvement, discussions with a foreign enterprise in order to establish a partnership agreement. In this respect, the policy environment is now much more favourable to the private sector. The case also demonstrates, however, the lack of an Ethiopian support system for enterprises wishing to establish partnership arrangements with foreign enterprises, a development the Government encourages. Currently, Government support to firms searching for partners abroad is limited to listing the names and activities of local companies seeking partners and disseminating this information at trade fairs abroad, through Ethiopian Embassies, or during visits by Government officials to developed countries. This process is not sufficient. There is a need to develop a clearly defined partnership support programme and implement it through an agency which works closely with the private sector.

A useful starting point in examining what Ethiopia can do to promote and facilitate partnership arrangements between domestic enterprises, especially SMEs and foreign companies is to first understand the processes involved in establishing and consolidating partnerships. Effective partnerships at the enterprise level need time and effort to develop. In some cases, they are the outcome of a long interaction and strenuous negotiations, often characterized by a process of trial and error and gradual building of trust. For example, it took over two years and nineteen trips to the Republic of Korea for managers/owners of a medium-sized enterprise in Ethiopia prior to start assembling televisions (TVs) locally in cooperation with a Korean company, Samsung. Prior to entering the TV assembly business, the enterprise was for many years engaged in trading, including the distribution of imported electronic products in the domestic market.

Several factors influenced the decision to shift from distributing imported Korean TVs to assembling them in Ethiopia. The first is simply that the managers/owners of the Ethiopian enterprise wished to diversify their business activities from distribution to manufacturing. Second, it was believed that assembling the product locally would reduce the cost of production and the final selling price, thereby making it competitive in the local market. Third, it was assumed that assembling TVs under license from an internationally recognized company would accelerate export market opportunities in the region.

Having decided to assemble Samsung brand TVs locally, the Ethiopian enterprise approached Samsung with a proposal to assemble their brand, Trihorn, under license. Not surprisingly, this proposal was rejected outright partly because of Korean skepticism about the

technical capacity of the Ethiopian enterprise and partly because the proposal did not contain detailed a business plan, assessment of local technological capabilities and knowledge of the industry. After the initial contact, it took nearly two years and several detailed negotiations to finalize an agreement with Samsung. In brief, the main factors that helped to bring about final agreement included: the determination of the managers/owners of the Ethiopian enterprise; numerous visits to the Republic of Korea for negotiations; two field trips to Ethiopia by two Samsung engineers, (one field trip lasted for two months) to study the level of technological capability and to help set up the assembly plant; training in the Republic of Korea for four Ethiopian technical staff, paid for by the Ethiopian enterprise; and the acquisition of machinery and equipment from the Republic of Korea.

This process and especially the tedious and time consuming negotiating process that followed, to an extent, demonstrates the general lack of experience in Ethiopia in arranging partnership agreements with foreign companies. More importantly, it shows the total lack of an Ethiopian support system for guiding domestic enterprises wishing to find foreign partners for purposes of attracting foreign investment, marketing arrangements or technology cooperation.

If the Government's objective of stimulating foreign investment and technology transfer through among other things joint-venture activities and/or inter-firm technology and marketing partnership is to succeed, then direct Government support through a specific "partnership promotion programme" is a necessity. This programme should deal with the various stages of arranging a partnership agreement. These include: (i) increasing awareness, among SMEs, of the potential and the advantages of partnering with foreign enterprises; (ii) assisting them in preparing the background work necessary before approaching a potential partner, such as defining the goals as well as the terms and conditions of agreement sought and specifying the medium- and the long-term objectives; (iii) helping with the search for an appropriate partner. Once the decision to form a partnership with a foreign enterprise has been taken, the next task is finding the right partner which is often a costly and arduous exercise for SMEs. The information needed to make decisions on all these factors is not always easily accessible to SMEs. Moreover, in Ethiopia, the private consultancy services available do not have the capacity to conduct a search and to advise local enterprises of potential foreign partners. The Government is in a unique position to play an important role in this respect.

Some measures that could be taken include, for example, keeping a catalogue of domestic enterprises wishing to enter into partnership arrangements and ensuring they prepare a proper business plan, assessing their technical and other capabilities. Search for potential foreign partners for co-financing, for example, assisting enterprises through Ethiopian Embassies abroad, subsidizing travel costs and even approaching foreign enterprises on their behalf, thereby playing the role of matchmaker and broker. The eventual success of partnership depends, to an extent, on the negotiation and communication skills of the partners. These skills are not easily developed, especially in SMEs, and support will be essential in these areas. Potential foreign partner perceptions will also be positive if it is known the Government supports it and wishes it to succeed. Finally, the partnership must be consolidated through regular exchange of information and by reviewing objectives and strategies. This can also be difficult for the partners since the arrangement has to show success to justify continuation. Incentive measures and adjustment of rules and

regulations governing partnership agreements can assist in easing the strains associated with partnering.

D. Market Orientation

The bulk of products and services from SMEs is aimed at the domestic market. The export-orientation of enterprises in the manufacturing sector in general and the small- and medium-scale enterprises, in particular is very low. Only two of the enterprises included in the survey produce solely for export markets. Both produce semi-processed leather products for international markets. Five other enterprises claimed that they export a small proportion of their outputs.

What is striking, however, is that some of the enterprises reported they export less now than they did prior to policy reforms. Two main reasons were given for this apparent regression in export capacity. First, the domestic market has improved greatly since 1992 creating the opportunity for enterprises to increase supply to the local market including by switching from export markets. It seems, therefore, for these types of enterprises, there is little difference between supplying the domestic and external markets. Indeed, interestingly, many SMEs in Ethiopia produce or are capable of producing manufactured goods that can compete in export markets, especially in regional markets, although they do not operate in export markets because they are satisfied supplying the local market. For some of them, it is “less hassle” to supply the domestic market. This story applies, for example, to one enterprise, which exported, for a period of seven years until 1994, leather jackets, leather belts and bags to markets in the region and Eastern Europe.

The second reason for deterioration in export capacity is linked to the elimination of State subsidies in the post reform period. Two of the enterprises in the sample, both state-owned and in the leather sector, claimed that their export volume has declined in recent years due to difficulties in importing inputs needed to produce export quality products. This problem was partly attributed to management reforms, which included, among other things, financial accountability and elimination of cross-subsidies.

There are now concerted efforts to improve the country's export capacity in general and the export of manufacturing products in particular. The establishment of an Export Promoting Agency in 1998 is a clear manifestation of this determination. The first step in boosting exports should be to ensure enterprises that have exported in the past, but have subsequently lost their export market share are able to regain it. It should prove relatively less difficult to support enterprises that have exporting experience with established contacts in export markets, than new beginners.

There is an urgent need to develop specific and targeted measures to induce SMEs into export markets. Nevertheless, the success of such measures depends, to a large extent, on their implementation through a specialized agency having direct contact with potential exporters. Moreover, this agency must monitor their progress through continuous interaction and by providing support, especially in areas where serious constraints exist such as transport, availability of information and quality control. Among the lessons that countries such as Ethiopia can learn from the experiences of successful exporters in East and South East Asia are, that in the earlier stages of industrialization, the most effective way of attracting foreign investment and generating export-oriented dynamic enterprises is through specific and targeted policies and hands-on approach to

export promotion. The role of the Government in this process is critical. The rationale for the hands-on approach and active Government involvement in export promotion and the reasons why domestic enterprises, including small businesses content supplying local markets, should be encouraged to export are two-fold.

First, apart from generating additional foreign exchange that is badly needed to meet import requirements and to ease the debt burden, the competitive pressure that export markets impose often induces learning and the drive to upgrade product quality through additional investment, product innovation and the acquisition of new technologies. The learning aspect of exporting manufacturing goods must not be underestimated and this by itself would justify providing direct support to SMEs that have the potential to export manufactured products. As confirmed during interviews with some enterprises, SMEs in Ethiopia are not always aware of their own weaknesses compared to "best practice levels". Exposure to competitive export markets and the experience of interacting with clients having diverse choice of supply intensifies the learning process.

Second, even if the potential to enter export markets already exists, initiating entry may not always be easy for some enterprises, especially SMEs. The cost of entering export markets are high and help may be needed in terms of information support, market intelligence, contract with foreign buyers, visits to trade fairs, design and packaging and so on. Even a modest injection of resources can help such enterprises greatly, if used judiciously to overcome the main market deficiencies.

E. Innovative Activities in SMEs

The survey results indicate there are many SMEs in Ethiopia that have invested in technological upgrading and innovative capability since the introduction of policy reforms in 1991. By the same token, however, there are also SMEs that are struggling to adjust to an environment characterized by heightened import competition and a withdrawal of many earlier forms of State support.

The following two challenges face policy makers in Ethiopia: (i) how to ensure that dynamic enterprises continue to invest in new technologies, improve their competitiveness, attract foreign investment and build export capacity; (ii) how to stimulate investment and technological change in less competitive enterprises. A two-pronged approach is necessary - one dealing with the more successful enterprises and the other with the laggards. At present, the view among Government officials is that policy and other forms of support should be directed primarily at enterprises in need of assistance rather than those that are doing fine by themselves. The Review Team believes that in the long-run, if this approach is followed it will have a detrimental effect on the development of the industrial sector as a whole. There are two reasons for this. First, in economic management, it is not only failures but also successes that need to be managed through appropriate policy and support systems. Second, visits to the more dynamic enterprises show that they are not devoid of problems and in fact, face many obstacles that block their future growth. The nature of innovative activities observed in Ethiopia as well as constraints will be identified and discussed. It is essential to identify and nurture such activities and use them as the basis for attracting foreign investment and enhancing foreign capacity.

The innovative activities observed within Ethiopian SMEs in Ethiopia can be grouped into two broad categories. The first involves improvements to "existing" products or the manufacture of copied products with minor adjustments. In some cases, it involves the introduction of new design, often copied from abroad, or slight modifications to production processes. Most of these activities are technological changes based on imitation with minor improvements or adaptations rather than innovation proper - as defined in chapter one of this report. Nevertheless, they indicate enterprises engaged in these activities are active in trying to adjust to changing demand conditions by investing in skills and technology to meet changing market needs.

More importantly, for the enterprises concerned, the technological changes introduced were economically important and enabled them to remain competitive and profitable. The survey results show that 44 per cent (12 out of 27) small-scale enterprises and 51 per cent (18 out of 35) medium-scale enterprises introduced minor technological changes in products and/or processes in the last three years. Interestingly, only 22 per cent (2 out of 9) of the large-scale enterprises included in the survey introduced technological changes in the same period.

The response of enterprises to questions regarding the sources of information and where the pressure for technical change originated from and whether learning is involved in these activities reveals that: (a) copying existing design or products is the primary source of knowledge; (b) most of the changes were introduced as a response to client needs and in an attempt to maintain market share; and (c) some of the enterprises claimed that new techniques were learned and also new skills were introduced as the result of technological changes. However, in all cases, interactions with R&D centres or technology support institutions in the country were absent.

A second feature of innovative activities observed, that enterprises have introduced, through large scale investment and in-house R&D efforts, are new products or a new production processes or management technique. Other factors were that, in most cases, these new additions have contributed to radical changes in the market position of the innovating enterprises either by improving the quality of goods produced or reducing the cost of production. The survey found that in the last three years, 20 per cent (or 7 out of 35) of medium-scale enterprises and 18 per cent (or 5 out of 27) of small-scale enterprises have introduced new products or have acquired new production processes which are, in many cases new to the country. In contrast, none of the large-scale enterprises included in the survey have undertaken product, process or management-related innovations.

In addition to those included in the survey, however, other even more dynamic and innovative enterprises were identified. Indeed, these include a number of well-known local firms with widely publicized innovative successes. For example, an enterprise developed local capability to manufacture elevators through reverse engineering and adaptations. It took the firm nearly three years to acquire the skills and technical know-how required to manufacture elevators which compete with imported products. The enterprise started out by repairing, overhauling and installing existing elevators. It gradually moved to manufacturing of components within its workshop. This period provided an opportunity to learn and acquire information of the tacit knowledge necessary for manufacturing capability. Interestingly, this particular enterprise had previously developed, through reverse engineering and gradual development of skills and know-how, local capability in the manufacture of traffic signals.

In order to build these import-substituting type innovative capabilities, the enterprise had to undertake various measures, including: investment in the transfer of new and specialized skills from a developed country (one of the firm's engineers was sent to Italy for advanced training); investment in new machines and equipment; establishing pilot projects and conducting R&D using tacit knowledge accumulated at the enterprise level. What is striking about this enterprise is how it was able to enter the business. Technological knowledge accumulated within the enterprise was important, but the critical factors contributing to the firm's success were good management and marketing know-how. The owner and managing director of the enterprise, an engineer by background, managed a furniture business for over twenty years, in Ethiopia and Kenya. Searching for a new design or a new product to maintain market share and to ensure competitiveness is part of the furniture business culture. It was partly this background and the manager's determination to contribute to the development of local innovative capabilities that dictated the choice of new product lines. According to the owner/manager, he wished to initiate the production of products that: utilize existing technological capabilities within the enterprise; involve innovative activities; contribute to an import-substituting process; provide his enterprise a competitive advantage in the domestic market; and open export opportunities. He has achieved most of these objectives and is currently working on the last objective - diversifying into regional export markets.

Another equally successful case of innovation involves a medium-scale truck body and trailer manufacturing enterprise. This enterprise, since 1994, was transformed from a standard truck body assembly plant into an export-oriented, innovative and one of the most dynamic and highly competitive enterprises in the country. How was this achieved? The turning point in the enterprises drive toward innovation came with the decision of the owner/manager to hire a highly skilled engineer from Germany with over thirty years experience in the truck manufacturing business

The owner/manager was imaginative and innovative for two reasons. First, due to the high cost, in local currency terms, of hiring an expatriate, especially from developed countries, it is unusual to find small- or medium-scale enterprises in Ethiopia taking the bold decision to hire skilled personnel from abroad. Second, the choice of the German engineer by the enterprise was strategic. With the engineers extensive experience in "best practice" production of truck bodies and trailers; his specialization and expertise in design and quality control; his experience of living and working in Saudi Arabia for 16 years; his first hand knowledge of the types of trailers demanded in the region; and finally, his extensive contacts in Germany and the Middle Eastern region, the Ethiopian enterprise gained all these elements and the tacit knowledge acquired from his past work experience.

The engineers' most important contribution was to introduce a new working culture and to convince the owner/manager that the enterprise had to develop a culture of innovation and quality if it was to prosper and become competitive in the domestic and international markets. In practice this meant:

- ◆ Encouraging specialization and providing enterprise level training to all staff, especially technical staff;
- ◆ Acquiring high precision machinery and equipment. The enterprise now has digital cutting machines computerized metal forming and universal machines, and computerized rolling machines. Most of these are new to the country. Another

unique addition is the installation of computerized painting capacity, the only one in the country;

- ◆ Introducing a "powder welding system" which is a method used in developed countries and involves using the same material as the product, but in powder form, for welding. This makes joints stronger and more difficult to crack. Specialized machinery and training was required to carry out this process;
- ◆ Developing in-house computer designing capacity. Training is given by the expatriate engineer;
- ◆ Setting up quality control procedures at every stage of the production process and strict enforcement for the rejection of sub-standard quality work. Technical staff have received training on the required standard. However, the expatriate engineer has retained overall responsibility of quality control;
- ◆ Introducing new products through in-house design. The variety of manufactured trailers include, petrol tankers and tankers for transporting chemical or dangerous substances. The latter types of products would not have been possible to manufacture if the various new introduced capabilities were not acquired by the enterprise. At present, over 70 per cent of the demand for the enterprise's output comes from export markets, mainly the Middle East. At the time of the interview, the enterprise had orders to keep it operating at full capacity for eighteen months.

Similar innovative activities have also been observed in other SMEs, including, for example, a manufacturer of plastic products which designed and built a water based machine cooling system as a substitute to the application of CFC, thereby reducing the cost of production, saving the country foreign exchange and contributing to environmental safety. These examples as well as many other innovative activities help to illustrate the types of innovative activities that SMEs in Ethiopia are, or are capable of, undertaking. The question is, what were the key factors influencing these innovative trends? Two types of influences can be identified: the pull and push factors. For the first set of innovative activities identified above, enterprise response suggests mainly the pull factors, more specifically the need to meet market or customer needs, were the principal catalysts for innovation.

Although the market influence was also important for the second group of innovative enterprises, it seems that the push factors were the dominant forces behind the innovative drive in these enterprises. The inspiration of the owner/manager, investment in in-house R&D activities and as noted above, external linkages in the form of skill/knowledge transfer, were some of the push factors influencing technological learning and innovation. However, in all of the innovative activities observed, none were influenced or inspired by specific Government incentives or technology support institutions in the country. Linkages between innovative enterprises and the scarce support institutions in the country are either non-existent or, in a few cases where linkages were detected, were ad hoc and ineffective. Even more distressing is the fact that the majority of the innovative enterprises were not even aware of the existence of some of the technology support institutions in Ethiopia.

What are the major obstacles to innovation within SMEs in Ethiopia? The responses of enterprises reveal the following:

- ◆ Lack of information support systems, especially on design, technology, best practices, market potential and partnership opportunities, be it for the purpose of investment, technology transfer or market access. The cost of searching and accessing relevant information is high for small enterprises in Ethiopia;
- ◆ Shortage of technical skills, in particular designing and precision machining. As observed above, some enterprises have training programmes but for the majority of SMEs, especially small-enterprises, training their own workers is not an option because of the high costs involved and the high turnover of technical staff. In a skilled labour shortage economy, training at the firm level involves a high level of risk;
- ◆ Relatively weak intellectual property rights protection system, although some improvements have been registered since mid-1990s following the enactment of a bill providing protection of patent right on creative works. The Ethiopian Science and Technology Commission has made great efforts to acquire the capacity to provide information on patented products as well as on international research centres. Since the enactment of the bill for the protection of intellectual property, the number of creative works registered increased rapidly. Be that as it may, during the Review Mission to Ethiopia, a number of enterprises indicated that in general the intellectual protection system in Ethiopia, particularly the legal procedure, is still weak and cumbersome. However, some of the enterprises that complained about the lack of a proper patent rights enforcement system were in many instances themselves abusers of such rights. Two of the more dynamic and innovative enterprises (furniture and plastic products manufacturers respectively), for example, claimed that they are discouraged from introducing new products because of rampant copying/imitation by other enterprises and the lengthy process of bringing abusers of intellectual property rights to justice. Curiously, however, the accusers themselves proudly claimed they had obtained designs illegally from abroad during visits to trade fairs or business trips and have copied and supplied final products in Ethiopia without the knowledge of the original designers. The rationale for demanding a stronger protection system is based on the argument that copying from abroad involves investment — the trips overseas, the cost of searching and developing copying capability, etc. — and therefore, firms must be allowed to recoup their investment. The Government is currently re-examining the whole issue of intellectual property rights. In this context, it is vital to ensure that the balance between protecting the rights of intellectual property holders on the one hand and competition and the diffusion of knowledge on the other is maintained;
- ◆ Absence of proper and effective standard setting and quality control mechanism. The existing quality control system is in dire need of upgrading to be brought in-line with the standards in competitor countries. Some of the innovative enterprises visited by the Review Team had to rely on foreign expertise for quality control, which is a costly and time consuming process. One enterprise had to delay production because a customer - a building contractor - demanded British standard PVC and no one in the country, including the Quality and Standards Authority, had knowledge of the required standard. In order to build local capability for innovation, diverse forms of collaboration and networks will be necessary. This will enable SMEs to share risks and costs. One form of institutional response to this approach is UNCTAD's Centre

for Innovation and Enterprise Development (CIEDs). CIEDs is a sort of network broker, which promotes synergies and creates linkages between enterprises and support institutions such as standards office and R&D centres. Operational in several African countries, CIEDs has developed its own methodology in terms of diagnostic tools. The specific features of this model of an innovation support system is described in Box V.1.

- ◆ Interestingly, neither financial constraints nor the size or quality of the local market were identified as major obstacles to innovation. However, lack of appreciation, by Government authorities, of enterprise efforts to innovate and introduce technological changes through learning and investment was highlighted as a discouraging factor. Among the enterprises interviewed by the Review Team, some were recognized through the UNIDO award for innovation. For some of them, this recognition has been most important factor inspiring them to continue building their innovative capability.

Box V.1

Centres for Innovation and Enterprise Development (CIEDs)

CIEDs represent a novel institutional response to the challenge of promoting innovation in manufacturing firms of developing countries. CIEDs constitute an emerging network of change-generating agencies designed to promote technological innovation in manufacturing SMEs and to stimulate the development of networks for innovation among firms and between firms and local knowledge-producing institutions (universities, R&D institutes, engineering consultancy firms, etc.) In Africa, CIEDs are now operational in Cote d'Ivoire, Ghana, United Republic of Tanzania and Zimbabwe.

The main focuses of CIEDs are: a) building and sustaining awareness of the need for innovation; b) strengthening the ability of firms to identify weaknesses in strategy and operations as well as bottlenecks in production; and c) serving as the link between firms and a network of support structures and suppliers who can help firms overcome their problems.

Indigenous small and medium enterprises form the primary clientele of the CIEDs. In some cases work with larger firms could also be undertaken, especially where such work holds the potential to promote innovation at the small and medium enterprise level. CIEDs help client enterprises locate appropriate sources of expertise and provide assistance in negotiations and project preparation. Typical projects include: industrial and management audits; work studies and process re-engineering; maintenance management; materials management/sourcing of raw materials, equipment and spare parts; technical training; market analysis for existing or new products; and upgrading product quality to meet local and external market requirements.

The nature of the innovation process — even at firm-on level — necessitates very close cooperation between CIEDs and existing business support as well as technology development organizations in each country. At the local level, strategic partnerships will be formed with organizations like Empretec, which have already established strong links with manufacturing enterprises and their associations. Linkages will also be forged with other organizations which have experience in the promotion of enterprise innovation.

Technology serves as the main point of departure for entry into manufacturing firms and CIEDs work primarily with enterprise level personnel to generate and implement innovative solutions to problems encountered within firms themselves. Any external inputs from consultants or experts drawn from the S&T/R&D and other institutions in the country are complementary to efforts within the firms. This is a cardinal principle that distinguishes CIEDs from most other business development service providers and helps to ensure the sustainability of CIEDs' initiatives.

CIEDs' focus on firms, helps to stimulate the demand for business development services. As firms begin to define their problems and enhance their capabilities for identifying and implementing technological innovation projects, they also begin to recognize those resources which must be sourced externally. This helps to strengthen the market for technical and other business development services and also to ensure that such services respond to the real needs of the firms.

In order to increase the learning experience at firm level, participatory approaches to project identification and implementation are used to the fullest extent possible ensuring that knowledge acquisition and deployment are maximized within the firm. High-impact and lower-cost projects are tackled first so as to minimize financial burdens on firms. Higher-cost projects are phased in gradually as firms build up their internal knowledge and confidence levels and hence their capacity to handle more capital-intensive activities.

CIEDs seeks to generate a continuous process of analysis and action within its client firms. To this end, CIEDs employs three diagnostic tools at various stages in its interactions with manufacturing firms. The first of these diagnostic tools B known as Change Assessment and Screening Tool (CAST) B is designed to help in the selection of potentially innovative firms. The second and third diagnostic tools B known, respectively, as General Information Seeking Tool (GIST) and In-Depth Enterprise Assessment System (IDEAS) B are used to assist firms in analyzing their problems and identifying possible solutions.

F. Attracting FDI from SMEs

A little known but growing phenomenon in global FDI flows is the emergence of SMEs as TNCs. Today, the overwhelming majority of some 60,000 parent corporations are SMEs. A large proportion of these are from the United States, Western Europe and Japan which invests mainly in regional markets. In recent years, however, a new trend has emerged involving SMEs from the Newly Industrialized Countries of East and South-East Asia. Rising labour costs, the push and pull factors of globalization and the intense competition in domestic markets are forcing SMEs from these countries to seek investment locations in the region and beyond, including Africa. These SMEs have special features which make them attractive to countries like Ethiopia and should, therefore, be special targets of investment promotion strategies.

They tend to be relatively labour intensive and therefore, appropriate for the Government of Ethiopia's objective of employment creation. In most cases, they prefer greenfield investments when establishing production abroad, thus contributing to technology transfer and local technological

capability building. They also tend to prefer joint-venture activities, which is ideal for learning by local partner enterprises. Finally, they tend to rely more on indigenous than expatriate personnel. For these reasons, as well as the fact that negotiating with SMEs is relatively less complicated than large TNCs, the option of targeting SMEs from East and South East Asia should be considered. The problem, however, is the cost of obtaining accurate information on foreign SMEs and disseminating it among potential local partners. This task should be performed by the EIA on the basis of a special programme to attract investment from foreign SMEs.

G. Support Infrastructure for SMEs

Survey results show that none of the enterprises contacted have regular interaction with any of the supporting institutions in the country. Some claimed occasional contact when specific problems occurred. What is striking, however, is the fact that many of the small enterprises are not even aware of the role and in some cases, even the existence of supporting institutions. In fact, the institutions themselves, nearly all of them from the public sector, do not seem concerned with the lack of information flow regarding their functions and objectives.

The two most important institutions that are directly involved in the promotion of SMEs are MOTI and the newly established MSED A. The latter is envisaged to operate the federal and regional level of Government.

(i) *The Ministry of Trade and Industry (MOTI)*

The Ministry of Trade and Industry is the main body of Government which coordinates the formulation and implementation of industrial policy. It is also the primary institution, at the Federal Government level, responsible for the formulation, coordination and monitoring of national and sectoral policies related to micro- and small-scale enterprises (MSEs).

(ii) *The Federal Micro and Small Enterprises Development Agency (FeMSED A)*

Enterprise promotion efforts in Ethiopia have traditionally focused on urban based and small and micro enterprises. In the 1960s and early 1970s, a department within the then Ministry of Industry and Tourism was responsible for coordinating promotion activities which basically consisted of providing training on business management. In 1977, the Handicraft and Small Scale Industries Development Agency (HASIDA) was established to provide training mainly in management and technical skills and to serve as coordinating agency for Government policy on small enterprises. Shortage of funds and unfavourable Government policy toward the private sector in the 1980s made it extremely difficult for HASIDA to have an impact on the development of local small enterprises.

Since mid-1999, the Government has revisited the whole issue of SMEs promotion in Ethiopia but with more focus on small and micro enterprises. A major study was conducted with the support of a donor agency which resulted in the preparation of a National Micro and Small Enterprises Development Promotion Strategy. The strategy outlines the policy framework and the institutional environment for promoting and fostering the development of micro and small enterprises and stimulating the entrepreneurial drive in the country.

Specific objectives of the support strategy are:

- ◆ Create long-term jobs (through skills upgrading programmes for micro and small enterprises and encouraging the use of appropriate and modern technologies to improve their capacity to create employment);
- ◆ Strengthen cooperation between small enterprises;
- ◆ Promote export (especially in areas where the country has a comparative advantage);
- ◆ Provide needed technical support for the graduation of small enterprises to medium and large-scale enterprises;

In addressing these objectives, FeMSEDA is expected to provide support to the Regional Micro and Small Enterprises Development Agencies (ReMSEDA). The services include training, business advisory services, information and facilitation of access to finance, technology, export markets and business linkages/subcontracting with large local and international companies. FeMSEDA has been established as an autonomous Government institution having its own legal identity and run by a board of management which includes representatives of the private sector. Private sector participation in the management of enterprise promotion agency is a new approach in Ethiopia. FeMSEDA is directly accountable to the Ministry of Trade and Industry.

(iii) The Regional Micro and Small Enterprises Development Agency (ReMSEDA)

The identification and selection of priority target beneficiaries will be the task of each region under the responsibility of ReMSEDA. However, broad guidelines are prepared by the federal agency to assist with the selection of the target beneficiaries. They will include micro and small enterprises which:

- ◆ Use local resources;
- ◆ Have backward linkages with agriculture;
- ◆ Engage in import substitution and have the potential to export;
- ◆ Engage in activities that facilitate and promote tourism, etc.

The assessment of the Review Team is that while the latest strategy for small and micro enterprises promotion is comprehensive and structurally more relevant, its approach to promotion, nevertheless, is still traditional and training-oriented. First, the focus is on micro and small enterprises only, leaving medium-scale enterprises without public sector support programme. As indicated previously, the assumption is that medium-scale enterprises do not need promoting and generally face less problems. Moreover, if support is required, they can afford to pay for the service. These assumptions are erroneous and need re-examination. Second, there is a tendency to lead from the top with heavy emphasis on training but little provision for enterprise-level diagnostic analysis and capability building. In this situation, quantity and wider coverage is given more weight than the quality of services provided.

The new strategy may, therefore, encounter difficulties in financing promotion programmes because of its emphasis on spreading the available limited resources as widely as possible to ensure that many of the regional agencies benefit from the new strategy. In addition, under the new support programme, enterprises would be expected to contribute, in terms of payment for services, to the

cost of managing the support programme. In fact, according to the Director of FeMSEDA, all support programmes will be based on strict financial discipline and will be structured in a way that self-help and financial contributions by entrepreneurs are encouraged and gradually increased. Sustainability of support programmes is a novel idea and should be encouraged but, given the history of private sector development in Ethiopia, it is somewhat unrealistic to expect small and micro enterprises to pay for services received from a public sector enterprise promotion programme.

Furthermore, because of the diversity of SMEs activities and constraints, there is a need to provide support services at different levels, including sectoral, enterprise, and specialized. This may sometimes require selectivity in the provision of support services and continuous involvement with a cluster of enterprises. FeMSEDA has not been designed, both in terms of objectives and resource and organizational capacity, to operate in this manner. It lacks the flexibility and business-oriented approach to service delivery. In this respect, the establishment in 1999 of the Enterprise Ethiopia Programme (Box V.2) - is a business support and capability-building programme - is an important addition to enterprise support structure in Ethiopia. The Review Team believes that the modalities applied by Enterprise Ethiopia will be more effective in responding to enterprise needs and in achieving sustainable results. FeMSEDA should seriously consider the possibility of adopting, fully or partly, the Enterprise Ethiopia model of business support system.

What is missing in FeMSEDA's strategy is networking and integrated approach to enterprise promotion. The main problem in Ethiopia is not lack of supporting institutions as such, because some facilities for the provision of basic services do exist, but rather the lack of interaction between existing service providers and enterprises, especially small enterprises. A unique role for FeMSEDA and ReMSEDA is to serve as a broker between small and micro enterprises, on the one hand, and a network of public and private sector supporting institutions on the other.

What would a brokering role involve in practice? It would primarily involve: ensuring that the target groups of enterprises are aware of the support services available in the country; identifying gaps in support services; assessing enterprise needs and matchmaking with the appropriate service providers; monitoring the impact of services; and providing market-oriented and businesslike support services. It would also involve working closely with private sector self-help organizations such as the sectoral and activity-related industrial associations. The most dynamic of these associations is the Ethiopian Small and Medium Enterprises Association (ESMENA). Among its objectives are encouraging inter-firm cooperation and the technological upgrading by SMEs.

Box V.2
The Enterprise *Ethiopia* Programme

Enterprise *Ethiopia* is an integrated capacity-building programme to foster entrepreneurial small and medium enterprises and regional business linkages. The programme is a joint initiative of the Government of Ethiopia, the private sector of Ethiopia, and supported by UNCTAD, UNDP, and the Enterprise Africa Regional Programme. It aims at stimulating the growth of new SMEs as well as existing companies from a cross-section of the small and medium enterprise sector, particularly in the manufacturing and service industries. In the selection of target beneficiaries, emphasis is given to existing companies with growth potential although start-ups are not excluded. In general, the target group consists of five basic types of SMEs:

- ◆ Existing companies in the manufacturing and service sectors, with an initial track record of good performance;
- ◆ Enterprises currently engaged in agri-business activities;
- ◆ Individuals who have had successful general retail operations and are willing to diversify into new value added activities;
- ◆ Companies which have benefited from grants or other credit facilities and are interested in consolidating or expanding their businesses;
- ◆ Start-up companies whose project proposals have the best chance of fulfilling the sub-contract requirements of large companies.

The primary goal of the Programme is to create success stories of Ethiopian entrepreneurs who would act as role models and generate the required demonstration effect for the local private sector. To achieve this goal, the basic strategy is to identify, screen, select and support high growth-oriented companies or potential "winners", especially those with the best chances to succeed and capable of effectively utilizing programme support. This strategy is based essentially on the Empretec Programme model. UNCTAD's Empretec model is a comprehensive and integrated package of core services and follow-up support interventions designed to improve the operational efficiency and enhance the competitiveness of emerging small and medium enterprises both in the domestic and export markets.

Overall Assessment

A major drive behind investment, technological learning and innovation is the incentive system and the macroeconomic environment in which enterprises operate. In Ethiopia, this environment has improved greatly since the introduction of policy reforms in early 1992. The revival and growth of the private sector, especially manufacturing SMEs, since then is directly related to rapid improvements in the macro policy environment. This chapter has shown that SMEs are among the most dynamic and innovative enterprises in the country. To ensure that they become the engine of growth for the Ethiopian economy and assist in attracting foreign investment, the isolated signs of emerging innovation must be nurtured and strengthened through more focused policies and support system. However, the culture of change, innovation and inter-firm cooperation cannot be created overnight nor are they effortless and costless, especially in Ethiopia where traditional habits and practices are entrenched and the support institutions required to build linkages are generally lacking.

An integrated and bold policy approach is needed to create awareness of the importance of quality and innovation to competitiveness and to build the incentive system and supporting infrastructures required to motivate SMEs to learn and respond to external pressures through innovative strategies. In short, therefore, the challenge confronting policy makers in Ethiopia is how

to build a policy framework that encourages continuous technological learning, investment in key sectors and ensuring that innovative strengths and core competencies which exist within individual enterprises, do not remain isolated.

Conclusions and Recommendations

A. Conclusions

(i) Overall assessment

The investment and innovation policy review of Ethiopia has taken place at a point when the country is at a watershed of radical change. On the one hand, it is emerging from a destructive and costly regional conflict. On the other, it is striving to do so in the context of rapid and fundamental changes in the global economy. In this new and intensely competitive global context, attracting foreign investment requires more than the willingness to host FDI on the basis of a liberal market and macro-policy environment only. Liberalization and the process of globalization have considerably increased the choices available to foreign firms over where to invest and locate each of their activities. Therefore, countries competing to attract FDI need to offer more than a liberal environment in order to ensure sustained inflows of FDI. It calls for more focused and well coordinated investment strategy, aggressive investment promotion efforts and above all, a host country that is politically stable with the necessary skills and a strong technological and infrastructure base. Before identifying specific policy recommendations for consideration by the Government of Ethiopia, a number of broad policy perspectives that have arisen from this Review exercise will be identified briefly.

(ii) The need for vision and a realistic view of the changing global investment climate

As competition to attract investment intensifies, it is becoming increasingly necessary that investment policies and promotion strategies are designed on the basis of dynamic competitive advantages. What does this mean in practice? It means that developing countries like Ethiopia should start by asking themselves what it is that they offer different from and more attractive than the choices available in competitor countries in the region or elsewhere. This, in effect, also means taking stock of ones assets or capabilities and being strategic in attracting investment. The tasks involved include:

- (i) Mapping out the core competencies and assessing the strengths and weaknesses of the economy and the growth opportunities available at the national, local and firm level;
- (ii) Identifying sectors or clusters of activities where competitive advantages already exist and where new ones can be developed;
- (iii) Formulating policies and incentive schemes that target sectors or activities identified as priority investment areas and that foster linkages between FDI and local enterprises.

In addition, policy-makers in Ethiopia need to be aware that the relationship between FDI inflows and domestic economic development run in both directions. It is evident that FDI contributes to host a country's economic development by injecting capital, technology and skills. However, it has become increasingly apparent that FDI is attracted most strongly to those countries

that have taken measures to strengthen their own technological capabilities and have created an environment conducive to domestic investment and the growth of the private sector. In effect, therefore, creating a vibrant domestic economy and a competitive enterprise sector which is supported by a strong local technological base is an important strategy for attracting and sustaining FDI inflows.

(iii) Devolved responsibilities through enhancing the role of institutions

Every opportunity should be taken to give greater attention to innovative activities and decisions at the individual entity level (e.g. enterprise, university, R&D institution, etc.). This will give these entities more freedom and flexibility to pursue specific objectives. For example, the evidence of the Bahir Dar Polytechnic indicates that its role in the new knowledge market should be quite different if it is to play the development function so badly needed in this region. Simply preserving it as a conventional tertiary education institute is not sufficient in itself, rather it should see itself as a key knowledge resource centre. Similar functions should be fulfilled by other tertiary education/research institutions across Ethiopia.

(iv) Policy analysis

There is a need to improve business analysis skills at all professional levels, especially within the civil service. Alongside this, the Government should foster the policy analysis skills of its junior staff. Such staff should begin to see their function not so much as ciphers in a hierarchy (the traditional role), but rather as key players in the evaluation of economic sectors and providing imaginative policy options for their supervisors. Where capacity is limited, greater use should be made of consultants from the local or external private sector. Ultimately, however, the objective should be to foster such capacities. The main objective should be to improve the creative energies in the enterprise sector as a whole and to lay the foundations for long-term sustainable development.

(v) Sector-system interactions

Finally, there is need for policy-maker and policy analysts in Ethiopia to think beyond a specific sector or activity and to relate their policies into the wider national system. In the case of the leather industry, for example, its effective development as a competitive and innovative sector and its attractiveness to FDI will depend on policy interventions at all levels of the value chain in the production process and the linkages generated between producers in the sector and supporting institutions. What is needed, therefore, is policies that impinge on supplier and customer sectors, ancillary services (such as finance and training) and the regulatory environment. At the regional level, for example, one way of bridging possible gaps in this area could be by turning regional investment offices into something akin to the “Development Agencies” increasingly common in many developed and developing countries. Transforming them in this way would reduce a natural tendency toward heavy bureaucracy and give much greater economic content to devolved powers.

B. Recommendations

(i) *Investment policy and promotion*

In the Management of foreign investment promotion:

- ◆ A single agency should have overall responsibility for all international investment promotion activities and negotiations in Ethiopia. Currently, there are other public-sector agencies that undertake international investment promotion in an ad hoc manner. This could give misleading signals to potential investors. At the present juncture, the ideal candidate to take the overall responsibility of investment promotion and coordinate promotional activities carried out by other agencies is the EIA. However, EIA must be strengthened and managed as an effective one-stop-shop and single entry door for inward investment into Ethiopia, including joint venture and new project investment by existing investors;
- ◆ The establishment of a small International Investment Advisory Council composed of senior executives from private sector international companies operating in Ethiopia. This Advisory Council will advise EIA and the Government on investment promotion policies and activities and act as contact group for potential investors seeking a private sector view on investment opportunities and potential in Ethiopia. It is important to build a stronger partnership between EIA and existing international investors.

In the area of foreign investment promotion activities, existing investment promotion effort can be enhanced through:

- ◆ Active planned enquiry and promotion visits to appropriate and targeted international investors by staff (Commercial Attaches) in Ethiopian Embassies abroad. EIA can support these through promotion skills training; the production of briefing profiles on target corporations; provision of essential market, incentives and other data; and case follow-ups for confirmed prospects;
- ◆ The use of Ethiopian Airlines executives, staff and resources to help promote recognition of and interest in industrial and commercial investment opportunities. This can include the dissemination of information on investment projects and opportunities in Ethiopia through in-flight magazines and entertainment services. Support from the Ethiopian Tourism Commission in these activities is vital;
- ◆ Effective marketing of business opportunities through Government media organizations including the expansion of the existing Government Website to encompass specific investment opportunities in a commercially relevant manner, drawing on best-practice in investment promotion from other promotion agencies. Benchmarking must be encouraged;
- ◆ In addition, the EIA should actively encourage Ethiopian businessmen and executives in other countries to contribute to the nations investment promotion activities and programmes. This includes encouraging them to consider investment in Ethiopia and to use their wider experience and corporate contacts to identify

appropriate companies and executives as realistic promotion targets for EIA. This has begun to emerge, but can be enhanced through active involvement by EIA;

- ◆ Ensure that FDI already operating in Ethiopia plays an active role in the international investment promotion process. Regular contacts between EIA and executives of foreign companies in the country and the involvement of the latter in investment promotion activities should be encouraged and supported.

There are also a number of areas of economic development associated with the promotion of international investment where the planned provision of infrastructure support will be necessary for and expected by inward investment. These include:

- ◆ Fully serviced industrial and commercial sites that are ready for immediate occupation by investors once they have decided to commit to Ethiopia. These sites are being developed, but must be expanded in terms of high quality locations and facilities throughout the country and available on attractive terms. Sites are more important than property;
- ◆ A clear long-term (and prioritized) national investment programme to improve the efficiency, quality and coverage of essential infrastructure in terms of utilities, power, roads and communications;
- ◆ The introduction of a programme to help establish linkages between new international investors and local suppliers of raw materials, goods, components and services to ensure the supplier infrastructure supports the competitiveness of international investors. This also requires an improved knowledge of the existing supplier base in Ethiopia; of the business development requirements of the local companies involved; and the associated national advisory and consulting capability on business development.

As indicated above, the main policy recommendation for the Regional Investment Bureaus (RIBs) is that they should be restructured to create Regional Development Agencies (RDAs). One of the key success factors in international investment promotion is, (as explained in chapter two of this report) formulating, delivering and managing an investment targeting strategy and action programme to attract and secure new investment in Ethiopia. Equally important in this investment promotion framework is an internal capability to meet all the demands made by investors as they consider facilities or a joint-venture. It is now increasingly accepted that this is also best pursued through a more focused and coordinated economic development framework and that this cohesion on the supply side is perhaps best delivered through RDAs. There is no doubt that the creation of RDAs could play a central role in strengthening the national investment promotion and process. The role in investment promotion are increasingly important in the context of international companies wishing to make quick decisions on investment projects; to have all the necessary information for their evaluations; and to have confidence that their property, labour, infrastructure, communications and fiscal requirements can be met. RDAs thus will have an operational unit dedicated to serving international investment both for potential greenfield investors and (equally) important for existing international companies already located in the region: this provides the matching single-door interface with the EIA. There is thus an effective partnership between the *EIA's* role in attracting the interest of international investors, and the RDAs responsibility in ensuring that appropriate land, infrastructure, labour and development support is available.

(ii) *The agricultural sector*

- ◆ Consideration should be given to refocusing agricultural R&D in order to make it demand driven and client oriented (including small holder farmers, agro-industries, exporters and commercial farmers). This will ensure that agricultural R&D addresses development needs more directly than at present. In this context EARO should play a greater role in monitoring and evaluation to ensure relevance of research to development;
- ◆ ESTCs role should shift from direct research funding to facilitator of R&D in a more generic sense. For example, it could begin to place even more emphasis on strategic questions such as monitoring research duplication; providing policy advice to higher levels of Government, giving research consultancy advice to R&D centres, developing measurable output targets against which to judge centre performance and fostering long-term links with overseas institutions;
- ◆ Within the funding of higher education (and given the imminence of cost-sharing measures) the Government should change patterns of funding to give more control to individual scientists and departmental heads. Budgets should be managed at a lower-level hierarchy subject to generic rules for each institution;
- ◆ Similar arrangements should be put in place for research institutions in the public sector. In addition, research managers should be asked to fulfil measurable levels of performance in return for being given a greater measure of discretion on how funds are spent. For this recommendation and the previous one there are now many models in Europe and North America that can be drawn on for inspiration. The Ethiopian authorities are encouraged to examine these with a view to reform part of its own governance structures;
- ◆ ESTC should take steps to ensure that its work is as much guided by development as by scientific norms in the conventional sense. That is, it should begin to see its role less as a traditional “science council” and more as an institutional means of encouraging innovation within relevant bodies. For example, it could advise on imaginative ways of using the private sector both as a source of technology and as an improved institutional way of encouraging exports. It should play a more direct role in advising senior levels of Government than it has done in the past;
- ◆ Human resource measures should focus more on “capacity-building” rather than “training” in the traditional sense. This would permit a greater focus on field research as part of courses and the use of distance learning arrangements with national resource centres. It would encourage the development of interdisciplinary and policy oriented skills as an essential human development ingredient;
- ◆ Care should be taken in the recruitment and use of expatriate staff to ensure that those employed do not take a narrow, discipline-driven approach to education. There was some evidence to the contrary given to the Review Team;
- ◆ Greater efforts should be made on the part of central bodies such as EARO, EIA and the ESTC to encourage greater integration across the Ethiopian NARS.

(iii) *The leather and leather products sector*

- ◆ Policies and incentive measures to promote investment and innovative activities in the leather sector should be designed taking into account the value chain in the production of leather goods and the support services necessary to foster the development of a competitive industry;
- ◆ Specific regulations, incentive measures and support from the Ministry of Agriculture are urgently needed to reduce the disease incidences and ecto-parasites (“Ekek”) problem and to promote improved animal husbandry practices which are badly needed to raise the quality of hides and skins supplied to manufacturers of leather goods. The implementation of these measures should involve all key players in the industry;
- ◆ A procurement system based on premium prices for better quality materials should be introduced in order to encourage the supply of higher standard hides and skins. The mechanism for implementing such a system is well developed and could be adopted in Ethiopia;
- ◆ The incentive structure should be designed to encourage the full utilization of existing/idle capacity rather than the expansion of the industry through additional investment to increase the number of tanning units;
- ◆ More focused policy instruments and incentive measures should be used to stimulate investment in effluent treatment plants and to induce tanneries to meet the required standards in effluent discharge. Concrete action at this stage of the development of the industry will help prevent future environmental hazards;
- ◆ Consultation and collaboration between the Government and private sector operators in the leather and leather products sector is needed to deal with skills shortage problem and to identify clearly the types of skills required to make the sector dynamic and competitive. In this respect, the establishment of the LLTPDI has been a timely addition to the support structure for the sector;
- ◆ In order to promote learning by enterprises in the leather sector and to encourage the transfer of technology and know-how, partnerships between leather products manufacturers in Ethiopia and foreign enterprises should be encouraged through incentive measures and direct Government support. Possible support mechanisms are identified in chapter five of this report;
- ◆ Although quality control and certification mechanisms exist, their implementation has been weak. There is a need to re-examine the implementation process and to define responsibilities of institutions and interactions between key actors in the sector. The Ethiopian standards on raw hides and skins and finished leather products should be revised.

(iv) *Small- and medium-sized enterprises (SMEs)*

- ◆ The EIA should develop a special FDI targeting programme aimed at foreign SMEs, in particular SMEs from the East and South-East Asian countries. This will require the EIA informing itself about foreign SMEs, their locational needs and areas of investment interest;

- ◆ The mandate of Micro and Small Enterprises Development Agency (MSEDA) should be refocused with emphasis on enterprise networking and brokering, as discussed in chapter five of this report. There is a desperate need for institutional capacity that links SMEs with existing public sector service providers and MSEDA is in a unique position to play that role. This mandate will require training and additional resources for the agency;
- ◆ Developing a culture of innovation and innovative capacity requires a concerted and determined effort and must be handled by a specialized agency with relevant skills and capability. Although MSEDA's mandates include supporting innovative activities, there is a need for more focused and targeted approach to promote innovation and technological upgrading. To that end, it is recommended that CIEDs (see Box V.I) be established in Ethiopia. Experiences from other developing countries show that such a centre could serve as a pivotal agent in stimulating innovative activities at the enterprise level. The Centre should be managed through a Board consisting of key stakeholders in the country, more specifically the Ministry of Trade and Industry, MSEDA, the Ethiopian Science and Technology Commission (ESTC), the Ethiopian Small and Medium Enterprises Association (ESMENA) and selected centres of learning, in particular the engineering department of the University of Addis Ababa;
- ◆ Technology can only be effective when people can use it. The development of a capable and competitive workforce is a key factor in improving the country's prospects for attracting investment and building innovative enterprises. However, it should be noted that learning and skill generation takes place not only in official, often public sector centres of learning but also at the enterprise level. The Government should provide incentives through relevant policy tools (for example, tax incentives, direct subsidies) to encourage enterprises to train their workforce with advanced skills. As explained in this report, the cost of training and high turnover has discouraged many enterprises from providing enterprise-level training;
- ◆ One of the major constraints in SMEs efforts to attract investment and introduce technological change is the lack of information about markets, supply networks and types and sources of technology. Indeed, this particular problem has been identified by many enterprises in Ethiopia, especially medium-scale enterprises, as more urgent than the traditional problems such as access to credit, and management skills. To ease this constraint, it is recommended that an "information bank" should be set-up with the help of international organizations that have experience in the modalities and functions of such a bank;
- ◆ In view of the willingness by many SMEs in Ethiopia to establish supplier and subcontractor relationships with foreign enterprises and the capacity that exists in a number of these enterprises, the EIA, in collaboration with ESTC, should establish an "investment, technology and marketing partnership" programme and assist local SMEs in searching for partners and arranging partnership agreements. Some of the key aspects of establishing partnership agreements are identified in chapter five;
- ◆ An annual award for innovative enterprises should be introduced under the responsibility of the Prime Minister's Office. The scheme should be managed by a board that includes the ESTC, the Ethiopian Chamber of Commerce, the MOTI and selected representatives from the private sector and the centres of learning .

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The first part of the text discusses the importance of maintaining accurate records in a laboratory setting. It emphasizes that proper documentation is essential for ensuring the reliability and reproducibility of experimental results. The author notes that many common mistakes, such as failing to record reagent concentrations or reaction times, can lead to significant errors in data interpretation. To avoid these pitfalls, the text suggests implementing a strict protocol for record-keeping, including the use of standardized forms and regular audits of the data logs.

In the second section, the author addresses the challenges of working with sensitive equipment. It is noted that modern laboratory instruments often have complex interfaces and require specialized training to operate effectively. The text provides a series of practical tips for minimizing downtime and maximizing the efficiency of these devices. For example, it recommends performing routine maintenance checks and keeping spare parts on hand to prevent unexpected breakdowns. Additionally, the author stresses the importance of safety when handling high-voltage or high-temperature components, advising the use of appropriate personal protective equipment and clear safety protocols.

The third part of the document focuses on the integration of new technologies into existing laboratory workflows. The author acknowledges that while digital tools and automation can greatly enhance productivity, they also introduce new risks and complexities. A key recommendation is to conduct thorough validation studies before fully adopting any new system, ensuring that the data generated is consistent with established manual methods. The text also discusses the need for ongoing education and training for laboratory staff to keep their skills up-to-date with the latest technological advancements.

Finally, the author concludes by highlighting the role of collaboration in a laboratory environment. It is argued that sharing knowledge and resources among team members is crucial for overcoming technical challenges and accelerating the pace of discovery. The text encourages the establishment of a supportive culture where team members feel comfortable seeking help and offering assistance. By fostering a spirit of teamwork and mutual respect, the author believes that laboratories can achieve their full potential and make significant contributions to their respective fields.