# MCI AND VCC WORKING PAPER SERIES ON INVESTMENT IN THE MILLENNIUM CITIES

**N$^{o}$ 10/2009**

# INVESTMENT OPPORTUNITIES IN MEKELLE, TIGRAY STATE, ETHIOPIA

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**December 2009**

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**MCI and VCC Working Paper Series**
**N° 10/2009**



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## Table of Contents

## Tables



## Boxes



## Figures



## Maps

## Acknowledgments

The author would like to express his gratitude to the many individuals who shared their time, resources and enthusiasm in the completion of this working paper. The author would like to particularly thank Millennium Cities Initiative (MCI) Co-Directors Dr. Susan Blaustein and Dr. Karl P. Sauvant, and MCI Senior Investment Advisor Joerg Simon, for the opportunity to work in Mekelle. In addition, the author would like to recognize the significant contributions of Paulo Cunha, Zachary Arney, Tatyana Gershkovich, and Lisa Sachs throughout the editing process and publication of the document. In Ethiopia, the author is particularly grateful to Aberash Abay, MCI's social sector specialist, who was invaluable in collecting information for this report. The author is also indebted to the numerous government officials in Mekelle who provided support and helped facilitate the research. Finally, the author would like to recognize and thank all the people who generously agreed to be interviewed for this project and share their thoughts. Their commitment to Ethiopia is truly an inspiration.

## List of abbreviations

| | |
|---|---|
| ACP | African, Caribbean and Pacific Group of States |
| AGOA | African Growth and Opportunity Act |
| AU | African Union |
| BOAM | Business Organization and Access to Markets (of the SNV) |
| BPR | Business process reengineering |
| BWUD | Construction and Urban Development Bureau |
| CBB | Construction and Business Bank of Ethiopia |
| CBE | Commercial Bank of Ethiopia |
| CIP | Capital investment plan |
| COMESA | Common Market for Eastern and Southern Africa |
| CSA | Central Statistics Agency of Ethiopia |
| DBE | Development Bank of Ethiopia |
| DECSI | Dedebit Credit and Savings Institution |
| EBA | Everything but Arms Initiative (of the EU) |
| ECA | Ethiopian Customs Authority |
| EEPCO | Ethiopian Electric Power Corporation |
| EFFORT | Endowment Fund for Rehabilitation of Tigray |
| EIA | Ethiopian Investment Agency |
| ELICO | Ethio-Leather Industries |
| EPA | Ethiopian Privatization Agency |
| ERA | Ethiopian Road Authority |
| ETB | Ethiopian birr |
| EU | European Union |
| FAO | Food and Agriculture Organization |
| FDI | Foreign direct investment |
| GIS | Geographic information system |
| GSP | Generalized System of Preference |
| GTZ | German Development Agency |
| HACCP | Hazard analysis and critical control points |
| HIPC | Highly Indebted Poor Countries |
| ICS | Interconnected (national grid) system |
| ICSID | International Centre for the Settlement of Investment Disputes |
| ICT | Information and communication technologies |
| LDC | Least developed country |
| MCI | Millennium Cities Initiative |
| MVP | Millennium Villages Project |
| MDRI | Multilateral Debt Relief Initiative |
| MIGA | Multilateral Investment Guarantee Agency (of the World Bank) |
| MIT | Mekelle Institute of Technology |
| NBE | National Bank of Ethiopia |
| NEPAD | New Partnership for Africa's Development |
| NGO | Non-governmental organization |
| OAU | Organization for African Unity |
| ODA | Official development assistance |

| | |
|---|---|
| PLC | Public limited company |
| REST | Relief Society of Tigray |
| SCS | Self contained (national energy) system |
| SME | Small and medium-sized enterprises |
| SNNPR | Southern Nations, Nationalities, and Peoples Region |
| SNV | Netherlands Development Organization |
| TAMPA | Tigray Agricultural Marketing and Promotion Association |
| TIO | Tigray Investment Office |
| TRRA | Tigray Region Road Authority |
| UGDP | Urban Governance and Decentralization Programme |
| UNECA | United Nations Economic Commission for Africa |
| UNIDO | United Nations Industrial Development Organization |
| UNMEE | United Nations Mission to Ethiopia and Eritrea |
| USAID | United States Agency for International Development |
| USTR | United States Trade Representative |
| WFP | World Food Programme |
| WTO | World Trade Organization |

## Executive summary

Mekelle,[1] a rapidly developing city in northern Ethiopia, is located about 780 km from the capital, Addis Ababa. Established nearly 150 years ago by Emperor Yohannes, the city is nestled in Ethiopia's temperate highlands, in the heart of a region that traces its origins back to the ancient Axum Empire that once controlled Red Sea trade (4$^{th}$ century BC – 10$^{th}$ century AD). The city maintains a proud history of many religions, particularly Orthodox Christianity, dating back to the 4$^{th}$ century AD. Mekelle was largely ignored in the latter half of the 20$^{th}$ century by Ethiopia's ruling feudal and socialist governments, but began to experience an economic and cultural rejuvenation with the election of a democratic government in Ethiopia in the early 1990s.

Over the past two decades, Mekelle has experienced rapid growth as the capital of the Regional State of Tigray. Due to long-term business development plans aimed at creating optimal market conditions, the city has become the home for many industries, agro-processing companies and educational centers. With an educated work force and a significant manufacturing base, the city is poised for sustainable economic growth. This working paper is meant to alert investors to Mekelle's potential and to provide an overview of the investment conditions the city offers.

With a population of 215,546,[2] Mekelle is one of Ethiopia's largest cities and among the closest to the ports of Djibouti, which are used for nearly all of Ethiopia's import and export trade on the Red Sea. The city is located at the hub of a road system that connects all major cities in the region. The recently constructed Alula Aba Nega International Airport provides for cargo and passenger needs. In addition, road rehabilitation and development projects are creating additional links to nearby cities and agricultural areas.

There are numerous opportunities for investment in and around Mekelle. One area of particular interest is agriculture and agro-processing. The region is well known for its superior livestock and honey, and a wide variety of fruits and vegetables. Livestock-based agro-processing can provide a myriad of opportunities for investors in the dairy, meat and leather industries. This region is likewise ideal for harvesting high quality honey and producing wax. As the largest producer of both livestock and honey in Africa, Ethiopia has the experience and supply volume necessary to process goods for domestic and international markets.

Mekelle is also well situated for attracting tourism. The city is at the center of a variety of cultural, historical, religious, and adventure tourism options. Erte Ale, one of the world's few active volcanic lakes, lies east of Mekelle, while the city itself is surrounded by fantastic rock-hewn churches that rival the more well-known rock temples of Jordan's Petra. This area is also home to one of the most important Islamic holy sites outside of Mecca, located in the town of Negash. The northern Ethiopian region offers tourists many cultural opportunities. In addition to tourism operations, there is significant opportunity to develop hospitality facilities focused on hotels and restaurants, as Mekelle lacks facilities to meet expected future demand. Further opportunities abound for investments in cotton, textiles, floriculture, spices, and mining.

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[1] The city is also spelled "Mek'ele" or "Mekele," although for consistency's sake, this report will use the spelling "Mekelle" unless referring to a particular organization or institution that utilizes a different spelling of the city.
[2] Government of Ethiopia, *Census 2007* (Addis Ababa: Central Statistical Agency, 2008).

As a result of these investment opportunities, Ethiopia is well poised to experience rapid economic growth. As one of the largest populations in Africa, it possesses a mostly untapped domestic market. Internationally, it is a party to numerous trading agreements, including the Common Market for Eastern and Southern Africa (COMESA) and the US African Growth and Opportunity Act (AGOA). As a member of the African, Caribbean and Pacific Group of States (ACP), it receives preferential treatment from the European Union. It also qualifies under the Generalized System of Preferences (GSP), which gives it preferential access not only to the EU, but also to many other developed markets, including Japan. Ethiopia's access to the US market is guaranteed by AGOA, which covers more than 6,400 items.

Despite much optimism, significant challenges to business operations remain. Ethiopia is a landlocked country and, consequently, transportation for imports and exports, while mostly dependable, can be slow. Some government agencies still suffer from bureaucratic inefficiencies; power supply can be erratic; and the land-acquisition process can be complex and time-consuming. However, institutions at all levels of government have begun business process reengineering (BPR) efforts to identify weaknesses and promote investor interests. Ultimately, with a large domestic market and a business friendly environment, Ethiopia is one of the most attractive places to invest in East Africa.

## Map 1: Map of Ethiopia


*Source*: Reliefweb, http://www.reliefweb.int/rw/fullMaps_Af.nsf/0/E85F2E6F11D6AB1785256E7D0058CFE3/$File/cia_eth210404.jpg?OpenElement (last visited November 2009).

### Figure 1: Ethiopia and Mekelle in brief[3]

**Ethiopia in brief**
Official name: Federal Democratic Republic of Ethiopia.
Capital: Addis Ababa.
Form of Government: Multi-party democracy.
Head of State: President Girma Wolde-Giorgis.
Head of Government: Prime Minister Meles Zenawi.
Location: East Africa, on the Horn of Africa.
Surface area: 1,127,127 square kilometers.
Climate: Temperate in the central highlands; hot in the lowlands. There are two rainy seasons from March to April and June to September.
Population: 74 million (2007).
Religions: Christian, 50 percent; Sunni Muslim, 40 percent; traditional African and other, 10 percent.
Languages: Amharic is the official language while English is widely spoken.
GDP: US$ 19.43 billion – at purchasing power parity; US$ 62.19 billion (2007).
GDP per capita: US$ 249 – at purchasing power parity; US$ 800 (2007).
Currency: Ethiopian birr (ETB).
Exchange rate: US$ 1 = ETB 9.94 on 1 January 2009 (UN operational exchange rate).

**Mekelle in brief**
Location: 780 km north of Addis Ababa, Ethiopia's capital.
Climate: Temperate, 16° to 30° Celsius year round.
Notable features: Former capital of the Ethiopian empire, now the sixth largest city in Ethiopia and capital of the Regional State of Tigray as well as a religiously significant area for Ethiopian Orthodox Christianity.
Population: Mekelle, 215,546 (2007); Tigray Region, 4.5 million (2008).
Religion: Christian, 93 percent; Muslim and others, 7 percent.
Languages: Amharic, Tigrigna, English.
The primary ethnic group in the area is Tigrian.
Main economic activities: Cement, timber, mining, light manufacturing, agro-processing, wholesale and retail trade.

[3] Millennium Cities Initiative, Earth Institute, Columbia University, drawing on various sources at http://earth.columbia.edu/mci.

## Chapter 1. The broader context

### A. Country background

Ethiopia is the largest country in East Africa and nearly twice the size of Texas. Its growing population of nearly 74 million (2007) makes it the second most populous country in Africa, recently passing Egypt.[4] The majority of the population (85 percent) is rural and engaged in agricultural production, spanning 18 agro-ecological zones and five traditional climatic zones, including alpine (Wurch), temperate (Dega), subtropical (Woina Dega), tropical (Qolla), and desert (Berha).[5]

As a landlocked country, Ethiopia shares boundaries with Eritrea to the north, Kenya to the south, Somalia and Djibouti to the east, and Sudan to the west. The Great Rift Valley runs from the northeast to the southwest and separates the Central and Eastern Highlands. Altitudes range from 110 m below sea level at Dallol in the northeast to over 4,600 m at the Semien Mountains in the northwest. Surrounding the highlands, which constitute 56 percent of the total area of the country, are extensive lowlands with altitudes of less than 1,000 m. Most economic activity takes place in the highlands.

Although the shortest distance to the seacoast is about 60 km from Ethiopia's northeastern border, this route is still inaccessible due to the delicate relationship with Eritrea. The next closest route is through Djibouti and covers over 700 km.

Ethiopia's population is comprised of about 80 ethnic groups of which the Oromo is the largest (nearly 40 percent of the total population), while the Amhara ethnicity accounts for an additional 20 percent. The country's major religions are Ethiopian Orthodox Christianity (45 percent) and Islam (40 percent), but many ethnic groups in the south also practice traditional animist religions (10 percent). The remainder of the population (5 percent) identify themselves as Catholic or Protestant.

As one of only two African countries never colonized (Liberia being the other), Ethiopia maintains a unique role in Africa's history. It has long been considered as a source of Pan-African culture and leadership. When the Organization for African Unity (OAU) was established in 1963, Addis Ababa was chosen as its headquarters. After the OAU was disbanded in 2002, the African Union (AU) chose to maintain its secretariat in Addis Ababa. Addis (as it is generally known) is also home to the United Nations Economic Commission for Africa (UNECA) and a major hub of non-governmental (NGO) activity on the continent. While Addis Ababa possesses a population of five million, the next seven largest cities, including Mekelle, are mainly regional and administrative centers with populations ranging from 100,000 to 400,000.

Ethiopia's history can be subdivided into three noteworthy periods of political and economic development. The country was initially a quasi-feudal society governed by the Solomonic Kings, whose rule began in the 13th century and lasted until 1974, when King Haile Selaisse (1928–1974) was deposed by the communist-backed Derg regime, a military junta led by Mengistu

[4] Government of Ethiopia, *Census 2007*, op. cit.
[5] Teigist Lemma, "Case study on Ethiopia" (Geneva: UNCTAD, 2006), mimeo.

Haile Mariam. This event marked the beginning of the second stage of political and economic development characterized by the socialist policies and nationalization projects often blamed for the negative growth experienced by the country throughout the 1980s. Finally, the dissolution of the Soviet Union and dwindling support from Russia allowed several Ethiopian rebel groups to overthrow the Mengistu regime in 1991, and orchestrate a remarkably peaceful transition of power. By 1995, the country had adopted a new constitution that fostered a multi-party democracy and peaceful elections. However, the country's initial growth and influx of foreign investment were only temporary. By 1998, the country was at war with Eritrea and suffering from an economic downturn at home.

Since the end of the 2002 recession, Ethiopia's economy has registered an average real GDP growth rate of 11.8 percent. In 2006/2007[6] (the most recent year for which data are available), the estimated real GDP growth stood at 11.4 percent, with agriculture, services and industry registering growth rates of 9.4 percent, 13.5 percent, and 11 percent, respectively. Over the past several years, there has been a boom in the service sector that now represents 41.2 percent of GDP. Construction activities have shown a similar increase, while agriculture as a share of GDP has decreased from 56.7 percent in 1996 to 46.3 percent in 2007.[7]

The Government has also taken several policy and legal measures to sustain growth. Since it was first adopted in 1992, the Investment Act has been revised several times to remove obstacles to foreign direct investment (FDI) in Ethiopia. Privatization has been ongoing since the Republic's founding in 1995, and the Government has sold many mismanaged and poorly performing companies to private investors. While privatization remains a priority, the Government continues to explore policies and laws to create a more enabling environment for economic growth and poverty reduction.

## B. The region

Historically, Ethiopia has been isolated politically and culturally from its East African neighbors. This has changed somewhat in recent years as the Government has committed itself to supporting regional trade and broadening interactions with other African countries. Ethiopia is now a member of the Common Market for Eastern and Southern Africa (COMESA) and home to the Africa Union (AU).

In addition, Ethiopia's skilled and affordable labor market is helping the country quickly expand its export production into Sudan, Kenya, and Djibouti. From traditional crops such as coffee and oilseeds to energy, meat, and wood products, Ethiopia is increasingly utilizing its diverse natural resources and burgeoning private sector to become a leading force among East African countries.

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[6] Note: Ethiopia still uses the Julian calendar. Accordingly, its year begins on Sept 11th and ends on Sept 10th. While the business and financial sectors use the western (Gregorian) calendar, some governmental accounting is done in accordance with the Julian calendar. The Julian calendar lags behind the Gregorian calendar by 7-8 years (e.g. the Ethiopian year 1999 would span 2006/2007).

[7] Government of Ethiopia, *Annual Report on Macroeconomic Developments: Macro Economy Policy and Management Department* (Addis Ababa: Ministry of Finance and Economic Development, 2007).

## C. The economy

The Ethiopian economy has experienced strong economic growth since transitioning to a multi-party democracy. Since 1995, it has posted a per capita growth rate of 2.4 percent.[8] Since 2003, the economy has witnessed an average growth rate of 11.8 percent. Inflation, on the other hand, reached as high as 41 percent in 2008.[9]

Because of Ethiopia's recent growth, it has also avoided the need for extensive debt servicing as the country has benefited from the Highly Indebted Poor Countries (HPIC) initiative,[10] as well as the Multilateral Debt Relief Initiative (MDRI). Reduced debt servicing and increased 0fficial development assistance (ODA), which amounted to US$1.3 billion in 2007 (of which 53.2 percent came from the US), have also greatly benefited the economic climate.

The Ethiopian Government has continued to emphasize infrastructure modernization, particularly with respect to roads and hydropower. With the completion of several high profile energy projects, Ethiopia is expected to begin exporting electricity to Sudan, Djibouti and Kenya in the coming years. Although agriculture is an important component of the Ethiopian economy (it employs 85 percent of the workforce), its share as a percentage of GDP is small relative to industry.

Privatization has also played an important role in helping develop skills and industries. Of the 360 public enterprises chosen for privatization, 294 were offered publicly by the Government between 1994 and the end of October 2006; 230 properties (worth approximately US$ 460 million) were sold; and 18 were returned to their original owners. Ten retail shops and one state farm have closed. None of Ethiopia's public utilities have been privatized to date, although the Government is looking for foreign investor partners for select telecommunications services. At the moment, the Government has 91 state enterprises under its control.[11]

## D. Markets

As one of Africa's most populous countries, Ethiopia has one of the largest domestic markets on the continent, although the purchasing power of the population is still limited. The country's nearly 80 million people create a large pool of semi-skilled to highly qualified professionals. By virtue of its membership in COMESA, Ethiopia enjoys regional market access through preferential tariffs. Potential economic reforms within the African Union would lead to greater trade liberalization among member states and provide further market access. Ethiopia's proximity to the Middle East also offers potential market and export opportunities.

In order to liberalize its markets further, Ethiopia has begun the accession process to the World Trade Organization (WTO). The country also qualifies for preferential access to European markets under the European Union's Everything but Arms (EBA) initiative and to US markets

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[8] See Globalis. *Ethiopia: GDP per capita annual growth rate.* http://globalis.gvu.unu.edu/indicator_detail.cfm?IndicatorID=45&Country=ET.

[9] United Nations Economic Commission for Africa, *Economic Report on Africa* (Addis Ababa: UNECA, 2009).

[10] In November 2001, the IMF and World Bank agreed on a US$ 1.9 billion debt relief program.

[11] Government of the United States of America, *Ethiopian Investment Climate* (Washington, DC: US Department of State, 2008), http://www.state.gov/e/eeb/ifd/2008/100861.htm (last visited November 2009)

under the African Growth and Opportunity Act (AGOA). Along with COMESA and the AU, Ethiopia is also a member of the New Partnership for Africa's Development (NEPAD). Furthermore, a broad range of manufactured goods from Ethiopia are entitled to preferential access in Austria, Canada, Finland, Japan, Norway, Sweden, the US, and most of the European Union (EU) under the Generalized System of Preference (GSP). No quota restrictions are placed on more than 3,000 export items currently eligible for GSP treatment.

**Box 1: African Growth and Opportunity Act**

The US African Growth and Opportunity Act (AGOA) was signed into law on May 18, 2000. It is meant to encourage trade with Africa by offering certain industries preferential access to US markets outside of free-trade agreements. AGOA covers some 6,400 items, including textiles and apparel. The AGOA Acceleration Act, signed into law on July 12, 2004 and known as AGOA III, extends this preferential access until September 30, 2015.

Eligibility for AGOA benefits is determined annually on the basis of a review by a committee chaired by the United States Trade Representative (USTR). In order to qualify for AGOA, countries are required to make progress toward establishing a market economy and the rule of law, and commit to policies to reduce poverty and combat corruption. Currently, 41 sub-Saharan countries are eligible for AGOA, including Ethiopia, which became eligible on October 2, 2000.

There is a different set of AGOA eligibility requirements for apparel (ready-made garments), an item of special interest to a number of African countries. Ethiopia became apparel eligible on August 2, 2001. From 2005 to 2007, exports increased from US$ 5.2 million to US$ 9.0 million.

*Sources:* AGOA website: www.agoa.gov/index.html and www.agoa.info/index.php?view=trade_stats&story=apparel_trade.

## E. Trade facilitation

The Ethiopia Customs Authority (ECA) has made a major effort in recent years to increase transparency; its valuation methodologies and procedures are available to the public on its website.[12] It has also made a great effort to streamline services to importers. Customs clearance time, which used to take 43 days on the average, has been reduced to less than a week in most cases. On November 18, 2006, Ethiopia and Djibouti signed a multi-modal transport agreement that enables the effective utilization of the port of Djibouti for the next 20 years, as well as door-to-door cargo transit between the two countries.[13]

## F. Exports

During the 2006/07 fiscal year, export earnings amounted to US$ 1,185.65 million. Compared with the 2005/06 fiscal year, total earnings increased by about US$ 185.4 million (18.5 percent) in 2006/2007. Sectors with the greatest earnings increases included flowers (192.3 percent),

[12]Government of Ethiopia, *Ethiopian Customs Authority*, http://www.telecom.net.et/~ethcusau.
[13]Government of the United States, *Ethiopian Investment Climate* (Washington, DC: US Department of State, 2008), op. cit.

pulses (90.2 percent), gold (50.5 percent), and live animals (33.4 percent). Meanwhile, earnings from oilseeds and meat products both declined by 11.4 percent and 16.5 percent, respectively. During the 2006/2007 fiscal year, coffee (US$ 424.2 million), oilseeds (US$ 187.4 million) and gold (US$ 97.4 million) comprised 59.8 percent of export earnings.[14]

Exemptions from customs duties or other taxes levied on imports are granted for raw materials necessary for the production of export goods. Three duty incentive schemes have been introduced to promote a wide variety of businesses and production types: duty drawback; bonded manufacturing warehouse; and voucher schemes. Although the schemes have been met with mixed results, on the whole they have proven to be highly beneficial to the efficient conduct of business throughout the country.

**Table 1: Value of major exports (in US$ million)**

| Particulars | 2005/06 | 2006/07 | Difference from last year | |
|---|---|---|---|---|
| | | | In USD | In Percent |
| Coffee | 354.3 | 424.2 | 69.9 | 19.7 |
| Hides & Skins | 75.0 | 89.6 | 14.6 | 19.5 |
| Pulses | 37.0 | 70.3 | 33.4 | 90.2 |
| Oilseeds | 211.4 | 187.4 | -24.0 | -11.4 |
| Meat and Meat products | 18.5 | 15.5 | -3.1 | -16.5 |
| Fruits and Vegetables | 13.2 | 16.2 | 3.0 | 22.5 |
| Live Animals | 27.6 | 36.8 | 9.2 | 33.4 |
| Chat | 89.1 | 92.8 | 3.7 | 4.2 |
| Gold | 64.7 | 97.4 | 32.7 | 50.5 |
| flowers | 21.8 | 63.6 | 41.9 | 192.3 |
| Others | 87.8 | 91.8 | 4.0 | 4.5 |
| **Total** | **1000.3** | **1185.7** | **185.3** | **18.5** |

***Source: National Bank of Ethiopia***

## G. Imports

During the 2006/2007 fiscal year, the value of imports was US$ 5,127.62 million. Machinery and transport (vehicles) goods was the largest import sector, with US$ 1,863.19 million (36.3 percent of the total merchandise import), followed by petroleum products at US$ 856.84 million (16.7 percent of the total) and manufactured goods at US$ 854.96 million (16.7 percent). Chemicals, and food and live animals account for 8.6 percent, and 4.0 percent of the total import bill, respectively, with others accounted for about 17.3 percent. Compared with the same period for the previous fiscal year, the total import bill for all commodities except for food and live animals increased by about US$ 534.81 million (11.6 percent).[15]

While there are very few prohibited imports (armaments, drugs, coins, radioactive materials, used clothes), several broad categories of products are subject to special permission by federal ministries, including foodstuffs, chemicals, pharmaceuticals, agro-chemicals such as fertilizers, and road vehicles and communication equipment. Prohibited export items include ancient

[14] Government of Ethiopia, *Annual Report on Macroeconomic Developments*, op. cit.
[15] Ibid.

treasures, indigenous seeds and plants, raw hides and skins, and live animals (unless a special license has been obtained).

Ethiopia requires that all importers hire registered Ethiopian nationals as official import or distribution agents. The importers or agents are required to apply for an import license with the Ministry of Trade and Industry as well as a foreign exchange account with the National Bank of Ethiopia. To conduct business effectively and participate in local tenders, it is advisable for foreign firms to appoint local agents to represent their businesses in Ethiopia.

**Table 2: Value of major import items (in US$ million)**

| Particulars | 2005/06 | 2006/07 | Difference from last year | |
|---|---|---|---|---|
| | | | In USD | In Percent |
| Food and Live Animals | 246.6 | 204.4 | -42.2 | -17.1 |
| Beverages and Tobacco | 14.2 | 16.3 | 2.0 | 14.2 |
| Petroleum Products. | 854.8 | 856.8 | 2.1 | 0.2 |
| Chemicals | 438.8 | 443.2 | 4.5 | 1.0 |
| Manufactured Goods | 826.7 | 855.0 | 28.2 | 3.4 |
| Machinery and Transport | 1478.4 | 1863.2 | 384.8 | 26.0 |
| Others | 733.4 | 888.8 | 155.4 | 21.2 |
| **Total** | **4592.8** | **5127.6** | 534.8 | 11.6 |

***Source: National Bank of Ethiopia***

## H. Foreign direct investment

Mekelle's ability to attract investment is to a large extent tied to Ethiopia's business and investment climate. FDI into Ethiopia grew with the liberalization of the economy in the early 1990s and the current government is seeking to eliminate further constraints on FDI by establishing an enabling environment for foreign investors. In 1998, authorities began to promote Ethiopia more vigorously as a location for FDI, and in 1999, Ethiopia's first investment guide was published. The Ethiopian Investment Agency (EIA) is responsible for approving FDI projects for both the pre- and post-investment phases.[16]

The liberalization of the economy has led to improved incentives and better marketing of the country. The gradual shift to privatization began with the sale of small retail outlets and medium-sized hotels and restaurants; two government agencies, the EIA and the Ethiopian Privatization Agency (EPA), oversaw the sales. The telecommunication and energy sectors have also begun attracting foreign investment. The privatization of state farms and agro-industrial plants has proven problematic in large part due to the competing claims for allocation of land titles by regional authorities. Having learned from past experiences, Ethiopian authorities and the IMF have agreed to carry out an economic program to privatize additional state-owned enterprises, including hotel chains, state farms, and plantations.

During the 2006/2007 fiscal year, 6,472 investment projects were approved (a 10.7 percent increase over the previous year), with capital invested amounting to nearly US$ 10 billion (a 16.9 percent increase over the previous year). Of this number, 5,322 projects with capital

[16] The pre-investment phase refers to the process of obtaining an investment certificate. The post-investment phase refers to the approval provided by the EIA for operations, such as vehicles.

amounting to approximately US$ 5 billion were licensed to private domestic investors. This was a slight increase from the previous year both in terms of the number of projects and amount of capital. By contrast, the number of projects approved for foreign investors reached 1,150 with capital amounting to US$ 5 billion. Despite strong capital increases in total domestic investment, 2006/2007 represents the first year that total approved foreign investment capital exceeded total approved domestic investment capital. In fact, in 2006/2007, foreign investment was 50.2 percent of total approved investment – a significant increase from just 32.3 percent during the previous year.[17]

**Table 3: Investment projects approved and potential employment creation**[18]

| Description | EFY 1998 | EFY 1999 | Difference | Percent change |
|---|---|---|---|---|
| | (a) | (b) | (c) = (b)-(a) | (d)=((c)/(a)*100 |
| Number of Approved Projects | 5849 | 6472 | 623 | 10.65 |
| Total Employment | 550,691 | 763,939 | 213,248 | 38.72 |
| Permanent | 210,936 | 302,598 | 91,662 | 43.45 |
| Temporary | 339,755 | 461,341 | 121,586 | 35.79 |
| Total Capital in Million Birr | 80035 | 93579 | 13544 | 16.92 |

Source: Ethiopian Investment Agency

**Table 4: Number of approved projects and investment capital**

| Description | Number off Approved Projects | | | Total Capital in Million Birr | | |
|---|---|---|---|---|---|---|
| | EFY 1998 | EFY 1999 | Percentage Growth | EFY 1998 | EFY 1999 | Percentage Growth |
| Domestic | 5090 | 5322 | 4.6 | 41838 | 46630 | 11.5 |
| Foreign | 753 | 1150 | 52.7 | 19983 | 46948 | 134.9 |
| Total | 5843 | 6472 | 10.8 | 61821 | 93578 | 51.4 |

Source: Ethiopian Investment Agency

These numbers are quite encouraging and signal an environment conducive to private investment. Of the total capital approved during 2006/2007, about 40.8 percent (US$ 4.1 billion) was concentrated in Addis Ababa, 27.2 percent (US$ 2.7 billion) in Oromia, 13.5 percent (US$ 1.4 billion) in Amhara, and 5.9 percent (US$ 500 million) in the southern region, according to the Ministry of Finance and Economic Development. Tigray received only marginal investment as a percentage of the total investment.[19] In comparison, actual FDI inflows into Ethiopia amounted to US$545 million in 2006 and US$254 million in 2007. The annual FDI inflows into Ethiopia averaged US$ 402.25 million from 2004-2007.[20]

[17] It is important to remember that these numbers indicate approved investments and that it is difficult to project what percentage of approved investment will be actualized.
[18] EFY 1998 spans the 2005/2006 calendar years; EFY 1999 spans 2006/2007.
[19] Government of Ethiopia, *Annual Report on Macroeconomic Developments*, op. cit.
[20] United Nations Conference on Trade and Development (UNCTAD), *Ethiopia Country Fact Sheet* (Geneva: UNCTAD, 2008).

# Chapter 2. Investing in Mekelle

## A. Introduction

Mekelle is the sixth largest city in Ethiopia and the capital of the Regional State of Tigray. Since the country's independence, Mekelle has been among the fastest growing regions of Ethiopia. The population has increased from 20,000 in the early 1970s to 215,546 by 2007.[21] The city lies in the Ethiopian highlands 780 km north of Addis Ababa. The city has a temperate climate and low malaria prevalence due to its elevation (over 2,200 meters).[22]

The city of Mekelle was established in the 1870s, and selected as Ethiopia's capital by Emperor Yohannes. Previously, it had been the site of several small settlements. The city's strategic location in a large valley in the Ethiopian highlands placed it at the crossroads of the ancient salt trade in the Afar region to the east, and within easy access of the Red Sea, 200 km to the northeast.

It is important to note that Mekelle is the primary economic hub in the Tigray region. Within a 100 km radius of the city, there are rich and fertile farmlands to the south, significant mineral deposits to the east and west, and over one hundred rock-hewn churches throughout the region that serve as important tourist destinations. Mekelle is also home to a number of top universities, including Mekelle University and the Mekelle Institute of Technology.[23] The Mekelle markets are reputed to be the largest vendors of livestock and salt in Ethiopia. The city's international airport, completed in 2003, provides daily flights to Addis Ababa and other Ethiopian cities. Its international cargo service is due to expand in the near future, now that the airport has received its international certification in 2008.

The region is known for its superior quality of its leather, produced from local sheep and goats. It has played a robust role in livestock-related industries, on which investors are eager to capitalize. Additionally, numerous readily available source materials have enabled the rapid growth of the city's industrial sector, which includes the largest cement plant in Ethiopia. Mekelle is now building what will become one of the country's largest metal re-processors, a project due to be completed in 2009.

In recent years, Mekelle has experienced increased agricultural production due to improved farming techniques and a transition from subsistence to cash crop farming. This growth has improved agro-processing opportunities for fruits and vegetables. The region is also a notable producer of high quality honey, and high value/low volume items such as spices, natural gum, and color additives. In addition, Mekelle maintains a reserve area for floriculture that should help attract greater investment into the city.

The regional and municipal governments have undertaken several initiatives to attract additional foreign direct investment to Mekelle. Along with the Millennium Cities Initiative (MCI), the Tigray Investment Office (TIO) helps to facilitate the investment process for domestic and

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[21] Government of Ethiopia, *Census 2007*, op. cit.
[22] Government of the City of Mekelle, *Urban Scope of Study: Mekelle Finance Planning and Management* (Mekelle: Mekelle City Plan Preparation Project Office, 2006).
[23] Both institutions use "Mekelle" in the official spelling.

foreign investors. The city and region have also started business process reengineering (BPR) programs to improve efficiency, promote development, and create opportunities for public/private partnerships.

Mekelle is strategically located in the Tigray region, with access to the primary port of Djibouti and the ports of Eritrea (once relations improve). Its pleasant and temperate climate offers great agricultural and tourist potential. The city's low operating and wage rates and wealth of skilled laborers and students should ensure that Mekelle competes favorably with Addis Ababa for prospective investors.

## B. Mekelle economy

Mekelle is home to over 800 grain mills, 500 food shops, an extensive public transport network and an active urban—rural exchange of goods. Mekelle has 30,000 micro and small enterprises. However, a significant number of them (65 percent) are in the informal sector, limiting the tax base. High levels of poverty (43 percent of the residents are below the absolute poverty line) and migration create further obstacles to providing effective public services in Mekelle. Long-term planning efforts, however, have helped Mekelle make progress in this respect. Between 1993 and 2002, the city received 65 percent of investment in the Tigray region.[24]

## C. Reserved areas of investment[25]

Foreign investors are allowed to invest in all areas except those reserved for the Government or domestic investors. Additionally, some areas of investment are designated only for joint ventures between investors and the Government.

### 1. Reserved for the Government

The following areas are exclusively reserved for the Government:

- Postal service, with the exception of the courier service.
- Transmission and supply of electric energy through the integrated national grid system.

### 2. Reserved for joint investment

The following areas of investment are reserved for joint venture with the Government:

- Manufacturing of weapons and ammunition.
- Telecommunications services.

### 3. Reserved for domestic investors

The following areas are reserved exclusively for domestic investors:

- Banking, insurance, microcredit and savings services.
- Travel and shipping agency services.
- Broadcasting services.
- Air transport with fewer than 20 seats.
- Retail trade and brokerage.

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[24] Drawing on information obtained from the Tigray Investment Office, *Tigray Investment Guide* (Tigray, Ethiopia: Tigray Investment Office, 2008).
[25] Ibid.

- Wholesale trade (excluding supply of petroleum and its by-products, as well as wholesale sale of locally produced products by foreign investors).
- Import trade (excluding liquefied petroleum gas, bitumen and, upon with approval from the Council of Ministers, materials used as inputs for export products).
- Export trade of raw coffee, chat, oilseeds, pulses, hides and skins bought from the market, and live sheep, goats and cattle not raised or fattened by the investor.
- Construction companies, excluding those designated as grade 1 by the Ethiopian Investment Agency.
- Tanning of hides and skins up to crust level.
- Hotels (excluding star-designated hotels), motels, pensions, tea/coffee shops, bars, nightclubs and restaurants excluding international and specialized restaurants.
- Travel agencies, and trade auxiliary and ticket selling services.
- Car-hire and taxi-cab transport services.
- Commercial road transport and inland water transport services.
- Bakery products and pastries for the domestic market.
- Grinding mills.
- Barber shops, beauty salons, and tailoring services, except garment factories.
- Building maintenance and repair, and maintenance of vehicles.
- Saw milling and timber making.
- Customs clearing services.
- Museums, theaters and cinema hall operations.
- Printing industries.

## D. Investment permit[26]

If a foreign investor makes a decision to invest, he or she must submit a request to the Ethiopian Investment Agency and meet the capital requirement for foreign investors.

### 1. Required minimum capital

The required minimum capital is US$ 100,000 for a single investment project or US$ 60,000 for a joint investment with domestic partners.

### 2. Required minimum capital (approved sectors)

In the following approved sectors - engineering, architecture, accounting and audit services, project studies, business and management consultancy services, and publishing – the minimum capital required is:

- US$ 50,000 if the investment is made wholly on his/her own.
- US$ 25,000 if the investment is made jointly with domestic investors.

However, a foreign investor reinvesting profits or dividends or exporting at least 75 percent of his/her outputs shall not be required to allocate a minimum capital.

[26] Ibid.

## E. Federal level investment incentives[27]

To encourage private investment and promote the flow of foreign capital and technology, the following incentives are granted to investors (both domestic and foreign) engaged in new enterprises or expansions:

### 1. Exemption from customs duty

Investors are granted full exemption from the payment of customs duties and other taxes levied on imports of all capital goods for the investment, such as plant machinery and equipment, as well as spare parts worth up to 15 percent of the value of the imported capital goods. Capital goods imported without the payment of import customs duties and other taxes levied on imports may be transferred to another investor enjoying similar privileges. Exemption from customs duties or other taxes levied on imports are granted for raw materials necessary for the production of export goods.

Ethiopian products and services destined for export are exempted from the payment of any export tax or other taxes levied on exports. Some investment areas, including hotels (other than those star designated), wholesale, retail and import trade, and maintenance services are not eligible for exemption from customs duty. Additionally, vehicles used for selected investment projects may be imported duty-free.

### 2. Duties

Ethiopian products (except coffee) and services destined for export are exempted from the payment of any export tax or other taxes levied on exports.

### 3. Exemption from income and profit tax

Duty-free import of capital goods, including vehicles, is exempt from paying income and profit taxes.

### 4. Tax holiday

Any income derived from a new manufacturing, agro-industry, or agriculture investment shall be exempt from the payment of income tax for 2-7 years depending on the area of investment, the volume of export, and the location in which the investment is made.

## F. Regional investment incentives

### 1. Industrial zones

The Government of Tigray has established industrial zones with basic infrastructure (such as telephone, electric power, road and water) in nine major towns in the region: Mekelle, Adigrat, Adwa, Axum, Endaslasie, Alamata, Maichew, Wukro and Humera. This enables investors to rent land at a lower fixed lease price without auction. The lease price for Mekelle is US$ 0.07 (ETB 0.75) per $m^2$.

[27] Ibid.

## 2. Approved investments for free land lease

Land can be leased for free in the following investment areas:

- Plant nurseries.
- Rubber and balsam production.
- Incense and resin production.
- Commercial forestry.
- Livestock production, meat preservation, and meat products.
- Dairy farming and processing.
- Poultry farming and processing.
- Technical and vocational training and engineering colleges.
- Hospitals.
- Construction of low-cost houses.
- Manufacture of pesticides and other agro–chemicals and products (must include bulk preparation).
- Manufacture of pharmaceuticals, medical chemicals, and botanical products.
- Manufacture of glass and glass products.
- Production, processing and preservation of fruits and vegetables.
- Manufacturing of prepared animal feed.
- Manufacturing of wines.
- Tannery and dressing of leather.
- Distilling, rectifying, blending of sprits; ethyl alcohol production from fermented materials.
- Manufacture of clothing apparel, except fur.
- Manufacture of leather products and articles.
- Manufacture of leather footwear.
- Manufacture of electric motors, generators and transformers.
- Manufacture of electricity distribution and control apparatuses.
- Manufacture of electronic valves, tubes, and other components.

## 3. Agricultural investments

For agricultural or agro-processing investments (outside the industrial zone), the current land rent ranges from US$ 2.70 to US$ 3.60 (ETB 30-40) per hectare. Lease periods can be up to 50 years from the Government and up to 20 years from individual farmers.

## 4. Land as collateral

An investor who has leased rural land may present his "use right" as collateral (Proclamation No. 97/1998, Article 9) and may bequeath his investment land to his successors (Regulation No. 40/1999, Article 26m).

## 5. Grace period for lease

Based on the type of project and the amount of investment capital, a grace period of 1-7 years is provided to any person who has leased urban land.

### 6. Reduced lease price

A lease price discount of up to 45 percent is available to real estate developers.

## G. Guarantees to investors[28]

As evidenced by the Investment Proclamation of 2003, the Ethiopian Government has a strong commitment to unfettered capital repatriation and the remittance of dividends and interest by foreign investors. Although legal protection only extends to government-approved investments, it covers the following remittance types:

- Profits and dividends accrued from an investment.
- Principal and interest payments on external loans.
- Payments related to technology transfer or management agreements.
- Proceeds from the sale or liquidation of an enterprise.
- Proceeds from the sale or transfer of shares or of partial ownership of an enterprise to a domestic investor.
- Compensation paid to a foreign investor.

In addition, expatriates employed in an enterprise may remit in convertible foreign currency salaries or other payments accruing from their employment, in accordance with the foreign exchange regulations of the country.

### 1. Guarantee against expropriation

Ethiopia's Constitution protects private property and the country's Investment Proclamation provides investment with guarantees against expropriation or nationalization that occurs in the public interest. When such expropriations occur, the Government guarantees adequate compensation corresponding to the prevailing market value of property, and such payment shall be effected promptly.

### 2. Loss carried forward

Business enterprises that suffer losses during the tax holiday period can carry forward such losses for half of the income tax exemption period following the expiry of the exemption period.

[28] Ibid.

## Chapter 3. Opportunities for investors

### A. Sectoral selection criteria and analysis

The main opportunities for investment in Mekelle and the surrounding districts include livestock (and related industries), apiculture, agro-processing (including vegetables and oilseeds), high value/low volume agricultural niche products, tourism (in particular, hotels and other support services), and manufacturing and mining. It is important to note that the specific opportunities described below are meant to be illustrative and these are by no means the only opportunities for investment in Mekelle.

This section draws extensively on documentation provided by the Ethiopia office of the Netherlands Development Organization (SNV). It examines Business Organization and Access to Markets (BOAM) and refers to interviews conducted by the author (see sources consulted in Appendix 4). To facilitate review of the sectors, each identified area will be broken into four sections: overview, current status, opportunities, and constraints.[29]

### B. Livestock

The livestock population of Ethiopia is the largest in Africa and the 10th largest in the world. According to a 2008 survey, the country possesses 47.5 million cattle, 47.8 million sheep and goats, 8.7 million pack animals, and 39.6 million poultry. Reports indicate that these numbers are increasing, and the livestock sector currently accounts for about 30 percent of the agricultural GDP and about 16 percent of the total GDP of Ethiopia. This sector is primarily driven by the hide and skin industry, but livestock is also a major source of food, with an annual per capita production of 24 liters of milk, 10 kg of meat, and 40 eggs.[30]

Currently, Tigray is estimated to have nearly 4 million cattle, 2 million sheep, and 2 million goats, accounting for 11 percent of the country's total livestock population. Although livestock populations are large, farmers in the region use traditional animal husbandry methods and, as a result, there are significant opportunities to increase efficiency and facilitate sector growth. Numerous investment opportunities exist to introduce commercial practices in livestock breeding, meat and leather production, and milk, egg, and animal feed processing.[31]

Livestock and livestock products are Ethiopia’s fifth most valuable export and accounted for US$ 66 million in earnings during 2007.[32] Annual production of livestock products includes 288,000 tons of meat, 938,000 tons of milk, and 16.7 million hides and skins.[33] The sector

[29] All investment-related data is sourced from the Tigray Investment Office, *Tigray Investment Guide* (Tigray, Ethiopia: Tigray Investment Office, 2008).
[30] Government of the City of Mekelle. *Urban-Urban and Urban-Rural Linkage Studies* (Mekelle: Mekelle City Plan Preparation Project Office, 2006); Government of Ethiopia. *Agricultural Sample Survey 2007/08(2000 E.C).* (Addis Ababa: Central Statistical Agency, 2008).
[31] Government of the Regional State of Tigray. *Policy Framework for Regional Development and Economic Growth Corridor*. (Addis Ababa: Tigray Ministry of Agriculture and Rural Development and UNDP, 2007).
[32] Government of Ethiopia, *Annual Report on Macroeconomic Developments*, op. cit.
[33] Johannes Agonafir, “Market and marketing of products within the selected value chains,” (Addis Ababa: BOAM—SNV, 2005).

nevertheless remains underdeveloped and the Ethiopian Government and African Development Bank have partnered to devise a 20-year livestock development plan to be introduced in 2009.

### 1. Milk products

**Overview**

Processed milk goods present a lucrative opportunity for a value-added product. A 2008 government-sponsored agricultural survey indicated that milk production was about 3.22 billion liters in 2008 with an average price of $ 0.50 per liter.[34] Milk is widely consumed in Ethiopia, but is commercially unavailable in most stores outside Addis Ababa. Dried milk powder and fresh milk purchased locally from households with surplus production fills some of the supply gap. Demand, however, remains high due to the prominence of milk and dairy products in the local cuisine. Unfortunately, dairy production remains underdeveloped despite large livestock populations.

**Current status**

Butter and cheese are consumed more commonly in Ethiopia than in other East African countries. Traditional butter is used for cooking and as a condiment, and traditional cheese is used during most meals. The high price and limited availability of milk are the major factors restricting greater usage in Ethiopia.

**Opportunities**

Potential intervention points include:

- Improve dairy products through cross-breeding cows and providing complementary feed to ensure higher quality products.
- Support raw milk producers (including small farmers) with training and organizational skills.
- Introduce milk collection centers with appropriate storage facilities to increase milk supply and reduce price fluctuation.
- Improve the packaging technology and quality of the finished product.
- Market/brand yogurt and cheese products based on local tastes.

**Technical constraints**

The major technical constraints in this sector include poor animal health, improper feed and nutrition, and poor breeding stock. However, the Government has aggressively targeted these issues in recent years. In addition, the Government has created an extensive network of animal clinics with heavily subsidized services to help address these problems. Research into feed and nutrition technology has been prioritized as has the increased use of productive breeds. Although problems still exist, recent improvements are noticeable.

- **Animal health:** Animal health inhibits dairy development in Ethiopia because poorly fed animals develop low disease resistance and fertility problems. The lack of veterinary services makes these problems difficult to address.
- **Feed and nutrition:** In highland zones, high population growth and density are causing a shortage of grazing areas for livestock. In the lowland areas, the shortage of feed and

[34] Government of Ethiopia, *Agricultural Sample Survey*, op. cit.

water during the dry season forces animals to trek long distances in search of food. The quality of feed also deteriorates during the dry season due to inadequate storage options.
- **Breed types:** Ethiopia's livestock has evolved in a challenging environment, and much of the stock has become better conditioned to withstand feed and water shortages, disease, and harsh climates. However, these factors also limit dairy production.

**Market constraints**
- Limited temperature-controlled supply chain (cold chain).
- Limited packaging choices (imported packaging is very expensive).
- Limited consumer buying power.
- Inadequate distribution systems.
- Religious holidays (such as Orthodox Christian fasting days) during which milk consumption is prohibited (although the effect is uncertain due to partial observance of fasting periods).[35]

**Box 2. Diary investments**

**Millennium Villages Dairy**
The Millennium Villages Project (MVP) is exploring dairy collection as an area for increased commercialization, in order to build stronger linkages with urban markets. Currently, the Koraro village cluster in Tigray State has a dairy production center that utilizes cows from 50 farmers. This center will soon begin production of cheese and cream products as well. As production expanded in 2008, the MVP formulated its regional production and distribution system to maximize its market share. In addition, the Food and Agriculture Organization (FAO) maintains a number of milk collection centers near Mekelle and there are plans to establish several large-scale production centers in the city itself. The Relief Society of Tigray (REST), a leading regional NGO, has made efforts to establish a share company to manage rural production and ensure fair trade practices.

**Investment story: Land O'Lakes Dairy**
Land O'Lakes is operating a non-profit campaign against hunger partially funded by the United States Agency for International Development (USAID). The NGO has a presence in 32 countries, including 11 in Africa. The NGO organizes the region into "milk sheds" in order to evaluate its dairy potential, including three in Ethiopia in Mekelle-Adigrat, Lake Tana (near Bahir Dar) and Addis Ababa. In the Mekelle milk shed, Land O'Lakes has helped establish 20 cooperatives. The cooperatives jointly own 60 percent of the 4,500 crossbred dairy cows in the Mekelle milk shed. Land O'Lakes also operates a processing center with a capacity of 5,000 liters per day and is actively securing long-term contracts with restaurants and cafés. The center began operations in August 2008 and employs a staff of 15.

*Sources*: Interview with Millennium Villages Project Business Development Coordinator, (May 28, 2008). Interview with Land O'Lakes Chief Operating Officer, (June 1, 2008).

[35] Business Organization and Access to their Markets (BOAM), *Milk and Milk Products Value Chain Coordination Group Meeting* (Addis Ababa: BOAM—SNV, 2006).

## 2. Meat products

There is only one slaughterhouse in Mekelle, the Abergelle Slaughterhouse. However, it processes fewer than a dozen cattle per day. The Abergelle Slaughterhouse is funded by the Dejenna Endowment, a non-governmental body founded in 2004 to develop agricultural and natural resources in Tigray. It began operations in late 2008.

**Overview**

Livestock herding currently supports or sustains the livelihood of an estimated 80 percent of Ethiopia's rural poor. Apart from its importance as a source of food and income, it is the only source of traction power in traditional peasant farms. Highland areas (where there is less cultivatable land) account for over 75 percent of the livestock population.[36] However, increasing livestock density has resulted in overgrazing on both arable and grazing land, which is also having a negative impact on land and vegetative cover, although the Government is making efforts to remedy this.

**Current status**

Livestock has many functions. It can be a source of (1) food, (2) employment and investment opportunities, (3) inputs for crop production and soil fertility management, and (4) fuel, through the use of dried dung. With these multiple functions, livestock can serve as a means for improving food security and ensuring better livelihoods for peri-urban and rural populations. Although livestock is vital to the economy and to the livelihood of smallholders, the livestock production system is hampered due to its lack of market orientation. Generally, livestock (meat or dairy) is not kept for marketing purposes. The primary reason for selling an animal is to generate income to meet unforeseen expenses. Meat exporters have found it difficult to set up long-term contracts with suppliers and usually must purchase livestock at animal markets. They have also established a vertically integrated supply chain. There are recent indications that as the markets have grown, supply problems have decreased. Most urban consumers either purchase live animals for home-slaughter or meat from butchers.

**Opportunities**

Despite the contributions of livestock to the Ethiopian economy, the Government has allocated very little money to develop this sector. In 2007, the Government allocated only 5 percent of its recurrent expenditure to agriculture, and less than 0.3 percent to livestock.[37] With scant previous investment in the livestock sector, future investors can capitalize on its potential. In addition to meat processing for both domestic and export markets, there is significant opportunity for improved animal health and disease control services.

**Constraints**

The livestock sector faces many of the same problems found in the meat and dairy sectors, namely inadequate feed and nutrition, widespread disease and poor health, and poor breeding stock, as well as inadequate livestock policies with respect to credit, extension support, marketing, and infrastructure. The government of the Regional State of Tigray has begun to address these deficiencies by assigning animal science experts to communities as part of general

[36] Wilhem Elfring, Yohannes Agonafir, and Mulugeta Tefera, "Value chains identification for intervention study on value chains," (Addis Ababa: BOAM – SNV, 2005).
[37] Agonafir, op. cit.

extension efforts. Abattoirs typically have very serious problems with disposal and utilization of byproducts. Offal removal is cited as a major obstacle by many companies, many of whom ultimately dispose of carcasses through unsanitary burning. The introduction of technology to either process offal into animal protein for feed or use in environmentally friendly cleaning/disposal mechanisms will require significant attention if the industry is to expand. However, the recent incorporation of waste treatment facilities into the tannery process bodes well for similar advances in the meat processing industry.

**Box 3. Meat production investments**

**Abergelle Slaughterhouse**
The Abergelle Slaughterhouse, one of the largest Dejenna Endowment-supported projects, produces exclusively for the export market. More than 95 percent of production is designated for export to the Middle East, primarily the United Arab Emirates (UAE), Saudi Arabia, and Bahrain.

The factory began operation in late 2008 as the first modern slaughterhouse of its kind in the region (and the only slaughterhouse in all of Ethiopia to export meat). It uses many advanced slaughterhouse techniques, including large cold rooms, vacuum packing, solid and liquid waste treatment, and a rendering plant for bone, meat, and blood processing. The 5.4 hectare slaughterhouse site is part of a system of three fattening stations. All components of the process are monitored and certified according to international standards and through routine inspections by independent federal inspectors. Land transport is used to ship more than 80 percent of production with the remainder exported as air cargo through the Mekelle International Airport.

The slaughterhouse has a total of 180 employees (fattening centers included) and initial capital of US$ 7.2 million (ETB 80 million). Employees work eight hours a day, six days per week. The slaughterhouse is designed to process 30 cattle and 120 goats per hour. Officials expect that initial bottlenecks will be remedied as animal supply networks are improved, and production was expected to increase in 2009. As part of an integrated livestock product chain, leather from meat production at Abergelle is sold to Sheba Leather (see box 4).

*Source:* Interview with Abergelle Slaughterhouse General Manager, (June 4, 2008).

## 3. Leather goods

### Overview
Ethiopian highland skins and hides provide a strong base for semi-processed and finished leather products. In 2007, the leather sector was one of the top five export earners, representing 6.5 percent of total earnings (livestock-related products comprised 12 percent of export earnings). Estimates place the off-take rate for hide and skin production at approximately 2.5 million cattle hides, 9.2 million sheepskins, and 6 million goatskins per annum (although actual production is less). There are now 20 tanneries in operation, four of which are state-controlled (the rest are under private ownership). Ethiopian tanneries have traditionally exported leather at various stages of processing (from pickled to crust) to international markets. The main markets include

China, India, Italy, Japan, the Netherlands, the United Kingdom, and the United States. Ethiopia is best known for its sheepskins, which constitute 70 percent of the hides and skins exported and 80 percent of all pickled hides. Since Ethiopia prohibits the export of raw hides and skins, the predominant export products are pickled and wet blue hides and skins. Approximately 60 percent of goatskins, for example, are sold as wet blue hides. Most of the exports go to Europe and Asia (very few go to COMESA member states). Ethiopian sheepskin and goatskin leather make up 2.2 percent and 1.3 percent of world exports, respectively.[38]

**Current status**

The significant increase in the number of tanneries in the past several years has raised demand for raw leather and increased prices without effectively addressing supply constraints. The 20 tanneries in Ethiopia have a combined capacity of approximately 25 million skins and three million hides, yet are presently operating at only 65 percent capacity for skins and 80 percent for hides. Four new firms are under development even though there are not enough high quality hides and skins to function at capacity. Company structure varies widely across the industry. For example, Mojo, a new tannery, has French technical assistance while Ethiopia Tanneries has a Czech partner.

Awash, Ethiopian Pickling and Tanning, Ethio-Leather Industries (ELICO), and ELICO Universal are all shareholding companies controlled by Mohammed Al-Amoudi, the prominent Ethiopian-born Saudi billionaire. ELICO is currently developing a new tannery for hide finishing.[39]

**Opportunities**

Ethiopia has the best-developed leather industry in sub-Saharan Africa, with the possible exception of South Africa. Ethiopian highland sheepskin is internationally recognized for its quality, and is in significant demand. The industry has considerable scale, experience, and capacity, as well as extensive forward integration. There are a number of trends in Ethiopia that support the development of this industry, including the privatization of large public sector firms. In addition, the United Nations Industrial Development Organization (UNIDO) provides support for effluent treatment plant design and installation. Although historically there have been few domestic market opportunities for finished products due to low consumer buying power and the relatively high cost of production, production costs are decreasing and there are indications this sector is now competitive with Asian imports. As Ethiopian firms gain an increasing share of the domestic market, export-oriented investment is a logical next step. For instance, Kenyan leather companies and consumers offer substantial import opportunities.

Building on underutilized infrastructure (the tanning industry is currently operating at only 30 percent capacity) will also be crucial. The production of leather uppers also has considerable potential, assuming a consistent supply of quality leather.

Taking into account the population of cattle, sheep, and goats, the estimated off-take rates, and the informal export trade of live animals, national leather and leather-goods production on an annual basis should amount to 2.5 million hides, 9.2 million sheepskins and 6 million goatskins.

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[38] Agonafir, op. cit.
[39] Ibid.

However, total production at Ethiopian tanneries has only reached 1 million hides, 7.5 million sheepskins, and 4.5 million goatskins per annum. Thus, the collection rate is about 40 percent for hides, and about 80 percent for skins. The high level of backyard slaughter by consumers and small butchers, and the relatively low price per hide and skin explain a large part of the gap between potential and actual collection.[40]

**Constraints**

The most serious problem with the leather sector is the poor quality of hides and skins, largely attributed to the traditional system of animal husbandry at the household level. While knife damage is the major problem impacting hide and skin quality, other issues, include disease, water shortages, poor livestock management and parasites also cause quality degradation. Unfortunately, once raw leather is damaged, little can be done to improve its quality.

Locally, shoes are the primary leather good in demand. Ethiopia prohibits the import of second-hand shoes, which results in a captive market for mid-range quality shoes produced by the local shoe industry. However, there is great demand for imported Chinese shoes despite their 40 percent import duty. However, locally produced shoes have a reputation for durability and are gaining a greater market share as prices decrease and more styles become available.

In general, Ethiopia has greater tanning and processing capacity than the existing market structure can support. Country-wide, tanneries are operating at only 30 percent capacity although recently introduced environmental standards should lead to closing less viable factories.[41]

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[40] Elfring, et al., op cit.
[41] Agonafir, op. cit.

### Box 4. Leather industry

**Sheba Leather**

The company was established in 1993 as a public limited company (PLC) with initial capital of US$ 800,000 (ETB 9.4 million), but the company did not begin operation until 2003 (due in part to the Ethiopian-Eritrean War). Sheba Leather will soon begin an expansion phase as it ultimately grows to a total investment of US$ 23 million (ETB 261 million). The tannery currently does not produce finished products, but with the completion of its expansion in 2009, it will begin producing 1.8 million pairs of shoes and 1.8 million gloves per year. While a portion of shoe production will be sold for the domestic market, the gloves will be almost exclusively export items. By the time the factory reaches full capacity, it will have 1,750 employees including technicians, supervisors, chemists, and designers. The company's financial sources indicate a close relationship with the Government; 60 percent of the company's funds come from the Endowment Fund for Rehabilitation of Tigray (EFFORT), one of two large government-initiated investment entities committed to achieving sustainable development through exporting goods and services. The other 40 percent come from private investors.

In its first several years of operation, Sheba Leather encountered difficulties due to the lack of technical capacity among its workforce and less than optimal quality of leather, of which 60-70 percent were poor due to parasites (mange mite), scratches, and knife cuts. The company is working to overcome quality issues through extensive test sampling from different suppliers. Currently, Sheba Leather only exports semi-finished leather to Europe and Asia. These exports are subject to a 5–25 percent tax on semi-finished skins in a governmental effort to encourage value-added production. Sheba Leather is operating at 75 percent of capacity, producing an average of 4,500 skins per day (with 6,000 skins per day at maximum capacity).

Sheba Leather has also emphasized environmental management. Although it currently operates only primary environmental treatment, the company will soon begin secondary treatment as well. In fact, of the initial US$ 20 million capital investment, 30–40 percent were reserved for waste management.

It should be noted that although no environmental impact assessment was performed before the factory was built, Sheba Leather is committed to achieving the highest international environmental management standards. Accordingly, the company has achieved certification through the International Organization for Standardization quality management system (ISO 9001/2000).

*Sources*: Sheba Tannery, http://www.telecom.net.et/~shebatan, and International Organization for Standardization, http://iso.org/iso/iso_catalogue/management_standards/iso_9000_iso_14000/iso_9000_essentials.htm.

## 4. Animal feeds

**Overview**
Modern livestock and poultry production requires concentrated feedstuffs in order to increase the value chain and ensure high dairy and meat output. Several medium and large concentrated feed producers are currently beginning production in Tigray in 2009.

**Current status**
At present there is very little concentrated feed supply in the country. Since meat is sold primarily to Middle Eastern markets, it must adhere to Islamic dietary law, thus preventing the use of animal-based animal feeds.

**Opportunities**
Since the major ingredients in concentrated feed come from locally available materials, this represents a prime investment opportunity. However, it must be noted that the lack of concentrated feed in Ethiopia is the primary factor limiting the viability of large-scale dairy and poultry production.

**Constraints**
Constraints facing production in the Mekelle area include a lack of preferred crop types grown locally. Waste products from oilseeds are the preferred ingredients for feed concentrates and these crops are primarily grown in western Tigray. Limited exposure feed concentrate production technology also presents a minor barrier.

**Box 5. Animal feed processing**

**Abergelle large-scale concentrated feed factory**
The Abergelle feed factory was expected to be completed in 2008. It will produce finished concentrated feed, composed of oil cakes, molasses, urea, salt, vitamins and minerals. The feed will be available in pellet form and powder. This factory will function as a sister company to Abergelle Slaughterhouse, but it will also sell to the general market and likely have a strong impact on the livestock industry in Tigray and throughout Ethiopia.

**Locally owned and operated animal feed processing**
Currently, several community associations in Tigray are using traditional feeding practices that collect dried chaff waste after the harvest. The eventual goal for several of these associations to develop processed feed using animal and plant waste materials. However, even a modestly-sized plant can cost up to US$ 500,000 and obtaining financing for such a project could be very challenging because of collateral requirements. It’s important to note, however, that business models that incorporate cooperatives or community associations are given preference for land and technical assistance by the Government.

*Source*: Interview with Abergelle Slaughterhouse General Manager, (June 4, 2008).

## C. Poultry

**Overview**

Poultry production in Ethiopia is not well organized and the sector is primarily controlled by informal smallholders. Local breeds offer poor egg production and small, low quality broilers. The local hen production capacity is 80 to 100 eggs per hen per year versus a commercial hen capacity of 250. Local breeds mature slowly and can require up to a year to reach market size, while commercial broiler breeds mature in 45 to 60 days.[42]

**Current status**

There has been much interest recently in poultry production. At the national level, the sector is rapidly changing as export-oriented and domestically-focused production units come online.

**Opportunities**

Improved broiler production requires the establishment of hatchery units that provide day-old chicks. In addition, egg production and quick broiler maturation requires concentrated feed. As a whole, the country offers significant potential for the development of a poultry business to cater to domestic consumption and export.

**Constraints**

Companies are likely exposed to disease and supply shortages, as well as the unavailability of feed, medication and feed ingredients. Current broiler production is limited by the import of day-old chicks for this use. This bottleneck can be remedied through the establishment of local broiler supplies in connection with foreign partners. This would ensure a sustainable supply of day-old chicks and alter the production dynamics of the business. An Addis Ababa-based firm has recently established a small hatchery unit to begin addressing this gap.

## D. Fishery

**Overview**

Tigray is an arid region with several high profile hydroelectric projects slated to come online in the near future. These sites can be used potentially as inland fisheries. Foreign investment is required to install fishing equipment, as well as cold storage and transport facilities. The reservoir at the Tekeze hydroelectric plant offers a new and undeveloped opportunity for aquaculture near Mekelle (the plant is located only 120km from the city).

**Current Status**

Ethiopian fishery is almost entirely artisanal, consisting largely of small, one-man rafts with limited carrying capacity.  Approximately 15,000 fishermen are employed in this sector. Aquaculture in Ethiopia is still in its infancy, with an average production of about 50,000 tons per year and revenue amounting to US$ 3 million.[43] Fish consumption in fishing communities is estimated to be as high as 10 kg per capita per year. In major urban areas, fish demand has been stimulated by the regular supply of quality fish at affordable prices, in comparison with the high price of meat. In 2004, the national demand was estimated at 85,000 tons, which is much greater

[42] Elfring, op. cit.
[43] Ibid.

than the estimated current total annual fish yield potential of the country (51,000 tons). Moreover, demand is expected to increase above 100,000 tons by 2010.[44]

**Opportunities**
A new opportunity for aquaculture in Tigray will be available once the Tekeze hydroelectric plant is completed. In addition, the public enterprise that now controls the marketing of fresh fish (i.e. Fish Production and Marketing Enterprise) is expected to be privatized as soon as a buyer can be found. Notably, the company maintains a well-functioning cold chain and maintains several outlets in Addis. Improved fishery farming and harvesting techniques combined with processing, storage, and preservation can help improve profits in this nascent industry.

**Constraints**
Fish production has been largely depleted in lakes due to poor management, and as a result, periodic fish restocking would be necessary to replenish the commercial fish population.

## E. Apiculture

**Overview**
Ethiopia ranks as the top honey-producing country in Africa and 10th overall in the world. It produces nearly a quarter of all African honey and just over two percent of total world output. It is also the 4th largest global beeswax producer after China, Mexico and Turkey. There are about 10 million bee colonies and at least 800 honey-source plants in the country with an annual honey and beeswax production of 24,700 and 3,200 tons, respectively. More than 90 percent of the honey produced is consumed domestically. This sector has been hampered by the low productivity of traditional methods, which produce 5–6 kg of honey per hive per year, while those using new hive technology can produce up to 60 kg per hive per year (although realistically they produce closer to 30 kg on average per year).[45] Collection of honey and beeswax begins after the rainy season in October and is completed by December. The major honey and beeswax producing regions in Ethiopia are Oromia, the Southern Nations, Nationalities, and Peoples Region (SNNPR) and Tigray.[46]

Beeswax is a valuable hive product obtained from honeybees. It is a by-product of honey production collected mainly from traditional hives rather than modern hives, which the Ministry of Agriculture and several NGOs are now promoting. The wax yield from traditional hives is 8–10 percent of the honey yield, compared to 0.5–2 percent from modern hives. The bulk of beeswax supply is obtained from residue during the production of “Tej,” a mild alcoholic beverage popular throughout Ethiopia.[47]

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[44] Food and Agricultural Organization (FAO), *Agricultural Production and Diversification Program Food and Cash Crops* (Rome: FAO, 2005).
[45] Interview with industry participant, (July 2009).
[46] United Nations Conference on Trade and Development (UNCTAD), *Ethiopian Investment Guide* (Geneva: UNCTAD, 2004), http://www.unctad.org/en/docs/iteiia20042_en.pdf.
[47] Agonafir, op. cit.

**Current status**
Beekeeping in Ethiopia is a traditionally important off-farm activity for many rural people. Both forest and backyard beekeeping are common cultural practices for many farmers. It is practiced in gardens and homes throughout the country. It is a small-scale, rural agricultural industry that provides a source of cash income for many peasant farmers. Several NGOs (e.g., REST) are actively involved in promoting and improving bee-keeping practices. There are 16 companies registered to export beeswax, but only four are currently active. Exporting can be difficult due to a lack of supply. All of the local districts (*woredas*) of Tigray produce honey of various colors—from white to red/dark—thus offering a wide market range to producers. Using traditional hives and methods, productivity in Tigray is estimated at 125 percent of the national average. The Wukro district (45 km from Mekelle and adjacent to the Hawzen district and the Millennium Village) is the largest producer in the Tigray region, followed by the Ahferom, Tselemti, Ganta-Afeshum, and Kolla-Tambien districts, in order of decreasing production.

The European Community is the world's largest importer of honey and Germany is the largest single consumer, followed by Switzerland and France. The US and UK are also significant importers, as are Japan, Nigeria, Algeria, and Libya. The traditional clients of Ethiopia are primarily in the Middle East - Saudi Arabia, Yemen, Israel, and the UAE - as well as Djibouti in Africa. Ethiopian honey is considered to be of good quality, even though in the world market it is often regarded as dark in color and strong in flavor. This makes the honey more suitable for specialized markets that pay premium prices. Prices for both raw and extracted honey are constant year-round in local and international markets. In Tigray, honey posts slightly higher average prices than in other parts of Ethiopia, but this is largely attributed to the superior quality of honey from this region.[48]

**Opportunity**
At this point, with a growing honey and beeswax industry, the objective is not to increase production but to identify value-added activities. Some potential products include organic honey or specialized cosmetics that require strict quality control of beeswax.

As global market preferences increasingly shift towards organic products, Ethiopian producers are well positioned to capitalize as premium organic honey suppliers. Ethiopian honey is derived almost entirely from wild bees, and no chemicals are used in any part of its production. There is reason to believe that if Ethiopian honey is certified to meet international organic standards and there is increased access to European markets, Ethiopia could develop a significant honey export market. In order to achieve this, several preconditions must be met:

- Introduction and dissemination of suitable and modern hives.
- Introduction of suitable storage and packaging methods.
- Introduction of modern methods of extraction and processing.
- Organization of marketing channels.
- Establishment of appropriate collection systems.
- Creation of extension networks and periodic training for producers.[49]

[48] Tigray Agriculture and Marketing Promotion Agency (TAMPA), *Honey Situation Analysis* (Mekelle: TAMPA, 2008).
[49] Ibid.

The production of organic honey can help stimulate local economies at the village level. Landless households in particular can benefit from this activity because apiculture does not require owning land. In addition to government support provided by the extension system, the Millennium Villages Project is in the process of instituting a large-scale honey and wax production system across its 11 Ethiopian villages, as well as developing collection and management systems for 4,000 hives capable of producing 240 tons of honey annually for revenue of over US$ 1.2 million.[50]

**Constraints**

The major constraints impacting apiculture in Ethiopia are a shortage of trained specialists and a lack of beekeeping equipment. Most outgrowers produce only one sixth of the honey that modern hives are capable of producing, largely due to their labor-intensive production methods and traditional apiculture techniques. These practices result in a higher priced honey that at times has difficulty competing on the international market.

[50] Millennium Villages Project (MVP). *Business Plan for Honey and Honey By-Products* (Hawzen, Ethiopia: Millennium Villages Project, 2008).

**Box 6: Honey investment**

**Dimma Honey**
The honey producer, Dimma Honey, directly oversees bee farms at 11 sites and 1,000 colonies across Tigray. At these sites, landless farmers are provided with modern hives and colonies on a credit basis redeemable through future honey production.

In addition to the 11 sites, there are 300 outgrowers maintaining 700 additional hives. Dimma is also coordinating with the Millennium Villages Project and might incorporate the villages into its production system. Dimma provides training and expertise to ensure that all honey products meet quality standards. Dimma relies on the relationships it has built with farmers, using an extensive system of information registration to determine a traceable supply that meets organic standards. However, Dimma has struggled to compete against lower quality, cheaper goods and is looking to introduce modern apiculture techniques.

Dimma's honey processing plant began production in 2007 and is able to produce an average of one ton daily, which is the largest output in Ethiopia. At present, Dimma is running at 50 percent capacity with one shift able to produce just 600kg per day. Production started in July 2007 with initial start-up capital of US$ 1.76 million (ETB 19.5 million). The company has 34 employees, including seven that hold bachelor's degrees. While Dimma is not presently exporting, it is actively recruiting markets in the Middle East and Europe.

Competition is limited in Dimma's niche field because no other honey producer in Ethiopia is producing organic honey for export. However, honey capacity in the region is growing significantly in part due to the traditional harvesting techniques as well as assistance provided by REST and other development groups. Dimma's high food standards are another advantage. The company is currently accredited through EU food safety regulations and will seek certification by ISO 9001 (at the cost of US$ 9,000 (ETB 100,000)) to provide quality assurance and conformity to international standards.

*Source*: International Organization for Standardization, http://www.iso.org/iso/iso_catalogue/management_standards/iso_9000_iso_14000/more_resources_9000/9001supchain.htm

## F. Vegetable and fruit processing

**Overview**
The economy of the Tigray region, much like the economy of the nation, is based largely on agriculture. The region is suitable for crops such as sorghum, sesame, cotton, barley, wheat, and teff. The region has an area of 53,638 km$^2$ including 3,220 km$^2$ (322,000 ha) of which is irrigable. Land with potential for irrigation in the region can be found in the Tekeze river basin (220,000 ha), Afar (65,000 ha), and Mereb river basin (37,000 ha). Currently, only 4,000 ha, or 1.2 percent of the total potential area, are being irrigated. The total water runoff in these three

basins is estimated to be 8.2 billion cubic meters. However, the amount of water currently used for irrigation purposes is less than 65 million cubic meters, or 0.8 percent of this total.[51]

**Current status**

Most of the fruits and vegetables grown in the region are grown for local consumption, but there is also significant export regionally to Djibouti. Processed agricultural goods are also exported to Yemen, Saudi Arabia and other Middle Eastern countries. Domestically, the two most important food products are oranges (for canned and bottled orange juice) and tomatoes (as ketchup, tomato paste and tomato concentrate).

**Opportunities**

The highest value export market is the European market through the Government-owned fruit and vegetable company, Etfruit. Etfruit collects fruits and vegetables from several state plantations and large private farms, transports them to the airport in refrigerated trucks, and ships them by air to Germany, Italy, and the Netherlands. Nationally, the major unprocessed exports are green beans, tomatoes, mangoes, and papayas. Private companies (only comprising 10 percent of the market share in 2005) have begun to follow suit. Ethiopian Airlines has recently purchased and leased new planes to increase the airline's capacity to provide more cargo services. Opportunities also exist for improved cold chain and storage technologies to mitigate the effects of the narrow harvest window.

**Constraints**

**Narrow harvesting window:** Smallholders cultivate several crops simultaneously, thereby flooding the local market during the very short harvesting period. Due to their financial needs and the lack of storage options, farmers are forced to sell at very cheap prices. The potential for increased storage opportunities is evidenced by the profits obtained by the few middlemen with storage capacity.

**Labor relations:** Providing necessary support to farmers, including through various inputs and training. There is also a narrow growing season and the outgrowers face great uncertainty when selling their products.

**Appropriate technology:** Vegetable and fruit processing requires centralized facilities with appropriate processing technology, which is currently lacking. The major constraint in this area is inadequate and irregular supply of imported packaging materials.

**Information:** There is little market information for producers or other actors in the domestic value chain. In addition, there is no seed improvement or extension service support for export crops, only for food security crops, although the Government is intensifying its efforts to improve the situation.

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[51] Government of the City of Mekelle, *Urban-Urban and Urban-Rural Linkage Studies*, op. cit.

**Box 7. Agro-processing investment**

**Aider tomato processing**
Construction of the Aider tomato processing plant started in 2005, although delays in construction and increased labor costs have resulted in a budget exceeding initial projections. The company began tomato processing in late 2008 with 4,000 $m^2$ of production space in the Mekelle industrial zone. Aider Tomato processes 5 tons of fresh tomatoes into tomato paste and dried tomatoes daily. It has US$ 1.7 million in capital and 45 employees.

The chief logistical challenge for the company is the seasonality of tomatoes, and this creates a glut of production at certain times of the year, particularly during the August to September peak. However, the price reduction since 2007 of the product from US$ 0.50-0.60 to US$ 0.09-0.30 (ETB 6-7 to ETB 1-3) per kilo suggests that there is a widely and readily available supply. This also provides Ethiopia with a significant competitive advantage as most of the processed product is exported by barrel to Dubai and other Middle Easter countries.

*Source:* Interview with Aider Tomato General Manager, (May 30, 2008).

## G. Agriculture

Agriculture on average accounts for about 40 percent of GDP, 85 percent of exports, and 85 percent of total employment in Ethiopia. The vast majority of agricultural output is achieved through smallholdings. Despite improvements, some constraints in the agriculture sector remain, including the lack of agro-processing opportunities; insufficient transportation; the absence or near absence of storage facilities; and the use of traditional, low-production methods of cultivation. These deficiencies limit the potential for production, and depress potential markets. Efforts to improve awareness of price, supply, demand and quality have been addressed by the Tigray Agricultural Marketing and Promotion Association (TAMPA).

### 1. Oilseeds

**Overview**
Edible oils have become Ethiopia's second largest export crop after coffee. Some oilseeds, including peanuts and sesame, are also important export crops. Tigray offers favorable agro-ecological conditions to introduce coconut and palm oil production. Unfortunately, the majority of these crops are grown in the western part of Tigray and more than 90% of the entire harvest (approximately US$ 5.3 million or ETB 60 million) are exported through Sudan to Port Sudan. There is marginal potential for routing oilseeds through Mekelle if the border with Eritrea is opened or if road conditions to the port of Djibouti improve.

**Current status**
Domestic sales of edible oils are equal to 60-75,000 metric tons (MT), or 1.0–1.3 liter/capita, with a value of US$ 60 million/year. Oils are primarily consumed domestically whereas sesame and niger seeds are primarily exported to Asia and Europe, respectively. In general, Ethiopia currently exports to or imports very little oil seed from other COMESA member states.

Ethiopia-sourced raw materials account for approximately 35 percent of the total oil supply. 22,000–25,000 MT of domestic oil is produced from approximately 100,000 MT of domestically crushed oilseeds per year. Oilseed production consists of sesame, niger, linseed, and rapeseed. The remainder of the domestically consumed oil is comprised of approximately 50,000 MT of crude vegetable oil that is imported annually (mainly soybean oil from the US).[52]

Ethiopia's installed crushing and refining capacity is 130,000 MT/year. About 60 percent of the processing plants are owned by the Government. Jointly, the plants operate at approximately 77 percent capacity. The big three crushers -- Addis-Modjo, Barda, and Amaresa -- are owned by the Government. Each has 100 MT/day crushing capacity providing the Government with 300 MT/day of 500 MT/day total crushing capacity. Addis-Modjo is the largest processing plant with a refining capacity of 15,000 MT/year, crushing capacity of 30,000 MT/year and solvent extraction capacity of 45,000 MT/year. However, it operates at only 30 percent capacity. Much of the imported oil supply is in the form of packaged refined oils. The lack of bulk handling facilities at the port in Djibouti makes importation of bulk oil very expensive.[53]

**Opportunities**

There is a strong international market both for whole and processed niger seed. Niger seed oil is popular among high-end customers, such as restaurants and export-oriented manufacturers, while whole seed is popular in Europe and the United States as birdseed. Large areas of arable land are theoretically available from the state for the production of additional seed. Alternatively, additional production of oilseeds could take place on existing farms. International prices for niger and sesame seeds are high, and oilseed production is increasing in response. Japan and Korea pay premiums for whole sesame seed, although sesame oil can also command premium prices in the vegetable oil market. Pulses complement oilseeds well (they can be rotated with oilseeds) and are also in demand on the international market. Rotation thus becomes a viable, environmentally sound system for maintaining soil quality while reducing the need for expensive chemical inputs. According to TAMPA, even minor value additions such as bailing can increase the price of exported oilseeds by 30 percent.

**Constraints**

**Working capital:** Most crushers reported that they lack the working capital necessary to buy seasonal products and store them for year-round crushing and sales. Infrastructure (especially electricity and water) near available land is also described as poor (although the Government is working to address these issues). As a result, oilseeds can only be stored for short periods of time, and the domestic transport of oilseeds is very expensive due to the inadequate road/rail system.

**Regional markets:** Niger seed is the most prevalent seed grown in Ethiopia, but most COMESA markets do not have a high demand for niger or its oil. There is especially little demand among the low-buying-power consumers who comprise the vast bulk of the market. Except for niger seed, most COMESA members produce the same oilseeds and oils as Ethiopia. High transport

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[52] Tigray Agriculture and Marketing Promotion Agency (TAMPA), *Annual Report* (Mekelle: TAMPA, 2007).

[53] Johannes Agonafir, "Strategic intervention plan on selected four value chains and two reserve chains," (Addis Ababa: BOAM–SNV, 2005).

costs, poor infrastructure, and the high cost of land mean that, in the regional market, Ethiopia has limited comparative advantage in most seeds. Consequently, most investment is likely to be directed toward domestic consumption or the export of specialty seeds such as niger and sesame. On the other hand, Ethiopia is currently a net importer of oils, and could be an attractive location for an investor interested in supplying regional oilseeds.

**Domestic market:** Domestic oilseed prices for sesame and niger seed are high because they compete in the international market, which sets higher prices. Imported oils are cheaper than locally processed high-end oils, thus profit margins for local production of sesame and niger oils are low. At present, the local market tends to support the export of specialty seeds and the import of locally-demanded oils.

**Subsidized competition:** USAID-supported vegetable oil distorts the market because its production and distribution is subsidized. This subsidized oil has an advantage over all other imports and even local production and sells below the market price for comparable oils from other sources. Recipients are reported to prefer to sell the oil for cash rather than for consumption. [54]

[54] TAMPA, *Annual Report,* op. cit.

**Box 8. Edible oil investment**

**Yegaw PLC**

In Ethiopia it is common for companies to grow out of other businesses because established entrepreneurs have sufficient capital to fund new enterprises. Yegaw PLC started as a coffee wholesaler and later developed into a milling company, rental agency for cars and houses, and nail manufacturer. The company is now branching into edible oils.

Yegaw PLC occupies a 2,000 $m^2$ factory and administrative center, with start-up costs exceeding US$ 600,000 (ETB 7 million). It currently has working capital of US$ 180,000 (ETB 2 million). Yegaw recently constructed a production factory for edible oil processing. However, to achieve economies of scale, it will need to significantly increase the capacity of the factory. Accordingly, the entrepreneurs involved have secured bank loans and imported production machinery capable of processing 20 times the current capacity, or 22,000 liters per 16 hour work day. The processed oil will be packaged in plastic bottles and barrels for distribution in Mekelle and surrounding towns. The viability of this enterprise will help to determine whether there is a benefit to the transport of raw ingredients from the western half of the Tigray region to Mekelle. The company will sell its waste material to butcheries and animal fattening centers for animal feed in the form of oil cakes. Since Yegaw's oils are made of sesame and niger seeds, which are in high demand in the international market, they are particularly well suited for future export.

*Source*: Interview with Yegaw PLC General Manager, (May 24, 2008).

## 2. Cotton for textile production

Cotton production is well integrated into the rest of the economy, with a large number of textile and garment factories relying on domestically-produced cotton for production. Opportunities for spinning, weaving and finishing textile fabrics, as well as processing of cotton, are significant. One company in particular, Maa Garment, is establishing a 4,000 ha cotton farm to meet its textile needs.

**Box 9. Cotton investment**

**Maa Garment**

The cotton producer, Maa Garment, has expressed an interest in creating a full value chain for cotton products, including growing, processing, and finishing. The company is currently securing farmland to process up to 4,000 MT of cotton with on-site ginning and spinning. So far, Midroc, an investment group owned by Ethiopia-born Saudi billionaire Sheikh Al-Amoudi, has invested US$ 23.8 million (ETB 267 million) in the company (although the Tigray Investment Office indicates that the approved total amount of investment could total as much as ETB 491 million).

*Sources*: Midroc Ethiopia Technology Group, http://www.midroc-ethiotechgroup.com, and interview with Maa Garment General Manager, (February 28, 2008).

## 3. Forestry

Alaje Forest Development, a Dejenna company, is the only forestry company in the Mekelle region. The company's reserves cover approximately 16,000 ha. The only other forestry reserve in Tigray covers 4,000-5,000 ha and is owned by the Tigray Bureau of Agriculture.[55] However, deforestation has been a significant problem in recent years and although resources are available for immediate extraction, a potential investor will find the Government will prioritize reforestation efforts. Thus, investors should proceed with the realization that they confront long return times on their initial investment.

**Box 10. Forestry investment**

**Alaje Forest Development**

Alaje was established in 2005 as a private limited company by Dejenna, the foundation set up in 2004 by the Government to develop agricultural and natural resources in the Tigray region. Prior to that, Alaje was a publicly-owned and community-supported plantation project. It currently employs 78 permanent workers. It began logging in March 2008. The company's reserves cover 16,000 ha, primarily in the southern zone, with limited operations in the eastern and central parts of Tigray. Of the total reserve area, 10,000-11,000 ha is forested. Estimated woodstock is nearly 500,000 cubic meters. The forest reserve is composed of 95 percent Eucalyptus trees and 5 percent indigenous species. Only eucalyptus wood is logged and sold.

**Maichew Particle Board**

Maichew Particle Board is located approximately 125 km south of Mekelle in the town of Maichew. It began operation in May 2008 with a starting capital investment of US$ 19.6 million (ETB 220 million). The company produces a three-layer particle board ideal for small furniture industries made mainly of eucalyptus wood supplied by Alaje Forest Development. Maichew is the largest Dejenna company; it has a total capacity of 70 $m^3$/day. It began operation with 210 employees and now has a potential workforce of 300.

Maichew has targeted the Ethiopian domestic market as well as several other East African markets. Chinese and Indian companies provide technical assistance, while all machines were purchased from German suppliers. The company's operational constraints include: (1) difficulties ensuring high technical proficiency and attracting a talented labor force, and (2) difficulties communicating with suppliers, distributors, and clients due to inadequate information technologies at the remote factory site.

*Source:* Interview with Alaje Forest Development General Manager, (March 26, 2008).

[55] Interview with Alaje Forest Development General Manager, (March 26, 2008).

## H. Agricultural niche products

### 1. Spice industry

**Overview**

Spices are widely used in Ethiopian cuisine and the country has seen recent improvements in spice production and trade. Berbere is a widely used spice mixture produced primarily from red-hot capsicum (a vegetable). The red-hot capsicum also serves as an ideal source for the extraction of oleoresins, a naturally occurring mixture of oil and resin.

The world market for imported spices and culinary herbs is large, valued at just over US$ 2.3 billion. The main importers are developed countries (principally the EU and US). The majority of imports are raw with minimal processing.

Spice imports have grown on average 8.5 percent per year over the past five years. The increasing affluence of consumers in Asian, Latin American and Middle Eastern markets, as well as the growth in the demand for ethnic cuisine in many countries has spurred the sector's growth.[56]

**Current status**

The EU and the US are the two largest import markets for spices. Between them, they import over half of the world's spices (32.1 percent and 22.5 percent, respectively). Singapore (8.7 percent), Japan (8.5 percent), Canada (2.8 percent), Malaysia (2.5 percent), and Mexico (2.2 percent) together import another quarter of world supply. Some developing countries such as Madagascar, the Comoros, Tanzania, and Malawi earn a substantial part of their foreign exchange from spice exports.[57]

**Constraints**

Strong competition among developing countries makes entry into the spice market difficult. Spices best suited for production and export in Ethiopia include pepper, chilies, nutmeg, ginger, marjoram, oregano, and basil. However, importers and consumers are hesitant to accept spices processed and packed in many Least Developed Countries (LDCs) because of their perceived reputation for poor quality and possible adulteration. LDC exporters also are often unable to meet international food safety standards (e.g. Hazard Analysis Critical Control Points - HACCP) and quality assurance (e.g. ISO 9000) standards. As the spice industry in Ethiopia develops, these regulatory hurdles are noticeably diminishing.

**Opportunities**

Spices such as paprika and capsicum for oleoresin are very suitable crops for smallholder farms, as they require high labor inputs and have a limited risk of perishing. Ethiopia's long history of spice cultivation, appropriate climate, and large labor pool make it a market capable of producing significant quantities for export if developed further.

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[56] Elfring, op. cit.
[57] Ibid.

## 2. Floriculture

**Overview**
Commercial floriculture is still a relatively new industry in Ethiopia, but it has emerged as a major export sector. The rose industry, for instance, has undergone successful development since its introduction in 1998. Ethiopia's relatively inexpensive labor force ensures low production costs and, when there are high yields, provides Ethiopia with the potential to export to European markets. Mekelle's international standard airport also provides a ready means for export.

**Current status**
Companies currently operating in floriculture include Meskel Flowers (the first established company), Golden Rose, Ethio Flora, Summit Agro Industry and Teppo Agricultural Development and Trade Enterprise.

**Opportunities**
Although floriculture development is concentrated near Addis Ababa, the Tigray Investment Office has indicated a strong willingness to support an investor interested in using Mekelle as a gateway to international markets, especially given that its international standard airport is now certified to provide direct exports.

**Constraints**
The chief constraint is water – since Mekelle is relatively arid, floriculture will need to ensure consistent water access. The area around Aynalem, which has been identified as a potential area for floriculture development, serves as a source of potable water for Mekelle.

## 3. Incense and wild gum

Although current production is negligible, a considerable amount of incense and wild gum potential does exist in the Tigray region. Reports indicate that in Tigray there are approximately 20,000 ha of land suitable for wild gum production and 100,000 ha of land suitable for incense plantation.[58] (According to the Tigray Investment Office, approximately 300,000 ha of land are suitable for incense plantation in the Tigray region.)

## 4. Essential oils

**Rose Demascena:** Rose Demascena is a plant used to produce essential oils for medicine and perfume. The oil production in Tigray is approximately 1.6 liter/ha (standard production is 1 liter/ha) with an average price per liter of US$ 6,000-7,000. Rose water and dried rose are two other products that can be produced in conjunction with the essential oil. Rose Demascena has already been introduced into several areas in Tigray and is in the process of being scaled up.

**Moringa:** Niche products such as Moringa and other essential oils and essences are typical low volume/high value products. The flavors and essences are used in the international food and cosmetic industries. Major manufacturers have recently researched and identified the potential of

[58] Kindeya Gebrehiwot, et. al, "A key dryland tropical species in northern Ethiopia," (Göttingen, Germany: University of Göttingen, 2002).

Moringa oil in East Africa. At present, unprocessed plants are exported and no essences or flavors are processed domestically.

### 5. Cactus products

**Cochineal:** Food Safe Ethiopia, a Chilean conglomerate working in Tigray, is engaged in cochineal farming. Cochineal is an insect found on cactus plants that is processed to produce the Coche Carmen Aseed red food dye. Food Safe Ethiopia is involved in training 500 outgrowers in partnership with the German Development Agency (GTZ) to farm cochineal. The company has started to supply carmine to local companies in small quantities and was expected to achieve export capacity in June 2008. Although the company only exports raw cochineal, the Mexican company ALTECSA has shown interest in establishing a carmine extraction/processing factory in Tigray.

**Cactus flower:** A German company, Shewabe Pharmaceuticals, is currently buying dry cactus flower from Tigray for medicinal purposes. Research by the Tigray Agricultural Marketing and Promotion Association has shown that the cactus flower has anti-depressant properties and alleviates discomfort in patients with inflamed prostates. Tigray is currently exporting the dried flower as raw material at very low levels given relative supply. Future experimentation is necessary to determine the potential of the Adigrat Pharmaceutical Factory to manufacture medicine derived from the cactus flower.[59]

## I. Agricultural support industries

With the growing commercialization of the spice industry, there is growing demand for manufactured agricultural products, the provision of support services such as cold storage, the maintenance of tractors, harvesters, and grain silos, and services such as transport and marketing.

**Box 11. Irrigation investment**

Bruh-Tesfa is a Dejenna-funded company that delivers irrigation systems to large-scale farms throughout the country, particularly in the Tigray region. Although their distribution is currently limited to the Tigray, Amhara, Afar, and Addis Ababa regions, expansion plans are being finalized. As of early 2009, Bruh-Tesfa was the sole producer of drip irrigation supplies in Ethiopia and East Africa. Bruh-Tesfa has recently expanded efforts as a supplier of park development irrigation systems and established demonstration sites at Mekelle Airport, the Abreha Castle Hotel, the Hawelti monument, and adjacent to the soon-to-be-developed Millennium Park.

*Source:* Interview with industry participant, (May 2008).

[59] Interview with Tigray Agriculture and Marketing Promoting Agency Agriculture (TAMPA) Specialist, (April 14, 2008).

## J. Tourism

**Overview**

Given its magnificent culture and history, there is a great potential for Ethiopia's tourism industry. Its attractions are many: Ethiopia possesses a unique historical and cultural heritage, breathtaking landscapes, a surprisingly moderate climate, rich flora and fauna, important archaeological sites and hospitable people.

The northern tourist circuit, known as the "Historic Route," comprises the most important tourist sites in Ethiopia and is located almost entirely in Tigray and its border regions. Of particular note is the ancient city of Axum (a UNESCO world heritage site), once the center of a powerful empire and now the spiritual center of Orthodox Christianity in Ethiopia. An indicator of Ethiopia's rich diversity is that within this "Historic Route" lies the Al Negashi mosque at Wukro – the most important site for Islam in Africa and a reminder of Ethiopia's impressive religious tolerance.

Tourism has the ability to play an important role in joining different technologies, cultures and traditions together. The nearest tourist sites to Mekelle are the rock-hewn churches of Tigray (nearly all located within a 100 km radius from Mekelle), the Erte Ale volcano and the Danakil Depression of the Afar region. In many ways, Mekelle is an ideal place to link the historic and religious sites of the ancient Axumite kingdom, the rock-hewn churches and monasteries of Tigray, the Danakil Depression and Lalibela rock-hewn churches, the Gonder castles and the Semien Mountains National Park in the Amhara region. As the roads throughout the country continue to improve, it is likely that car-based tourism will become the predominant means of travel within the region. Previously, inadequate roads forced tourists to take airplanes to their destinations in the Tigray region. However, as car and bus travel increase in popularity, Mekelle could become an ideal hub for the many tourist sites of northern Ethiopia.

**Current status**

Tourism in Tigray has steadily increased over the last 6 years. With only 4,412 visitors in 2001, the Mekelle region now receives more than 15,000 tourists each year. The Tigray region as a whole is estimated to receive as many as 100,000 tourists annually. A consultant has been hired by the Tigray regional government and is working on a tourism development plan for Tigray to strengthen both the region's brand and accessibility. With respect to numbers of tourists, Germans comprise the largest demographic group, followed by Americans, French, Italians, Japanese, and Spanish. Ethiopia is expected to benefit further as the trend towards cultural and historical tourism grows.

The Hawzen district near Mekelle, site of the local Millennium Village, is visited by nearly 3,000 tourists every year. There are plans in development to capitalize on the luxury ecotourism market and develop a series of luxury tents to promote the cultural, historical, and religious resources of the region. So long as the region's infrastructure improves, the area is poised to attract greater tourism.

Due to the many natural, historic and religious sites in the region, ecotourism provides one of the most viable sustainable business opportunities in the region. In particular, community-centered ecotourism efforts, such as those found in the Millennium Villages, can play a crucial role in generating job opportunities.[60]

**Opportunities**

There are numerous opportunities for tourism expansion in the region. Currently, there are only a handful of restaurants and hotels that cater to international tastes, although the Ethiopia-Saudi billionaire Sheikh Al-Amoudi is building a new luxury hotel on the site of the current Hilltop Hotel. The project highlights the potential for growth in the tourism sector in Mekelle. Lodges such as the one recently completed near Hawzen by an Italian investor offer additional investment opportunities.

**Constraints**

The Tigray Tourism Office has acknowledged that the region has been poorly promoted in the past. As a result, few international tour companies send tourists to Ethiopia. In Mekelle, only seven hotels have a star rating of any type and together, they hold only 400 occupants. Only two tour operators are based in Mekelle, although many others use the city as a transit hub. Other factors hindering Mekelle's development as a tourist center include:

- Limited city infrastructure.
- Limited regional road network.
- Unplanned growth in urban areas.
- Poor economic linkages to attract tourist dollars.
- Poor management of tourist attraction sites.
- Poorly conserved natural resources.

[60] Millennium Villages Project (MVP). *Business Plan for Ecotourism* (Hawzen, Ethiopia: Millennium Villages Project, 2008).

**Box 12. Tourism investment**

**Millennium Villages ecotourism**
The Millennium Villages ecotourism project in Gheralta, Tigray aims to create tent lodge systems for five local villages. However, the main challenges of the project include the need to locate investors and attract tourist dollars to the villages. Possible activities at the sites include horseback riding, rock climbing, trekking, and cultural tourism.

Currently, 3,000 tourists visit the Gheralta area each year. The tourist potential of the region is widely acknowledged and, in conjunction with tourist sites in Axum, could play a central role in a regional development plan. The Millennium Villages ecotourism business plan calls for an investment of US$ 1.5 million to establish five tent lodge sites connected by scenic trails in a loop structure. Construction on the first two sites would occur in 2009. The Tigray Tourism Office optimistically projects 120,000 visitors to Tigray by 2012, up from 15,000 per year currently.

*Source:* Millennium Villages Project (MVP). *Business Plan for Ecotourism* (Hawzen, Ethiopia: Millennium Villages Project, 2008).

## K. Manufacturing

Manufacturing, while not significant for the export market, is growing rapidly to meet domestic demand. Total revenue generated in 2006/2007 amounted to US$ 380 million (ETB 4.3 billion), representing an increase of 19.8 percent from the previous year. However, only 7 percent of the total sales are generated from exports.

**Dependency on imports:** A major obstacle to profitability in this sector is the dependency on imports. This is mainly due to raw materials that are either not found in Ethiopia (e.g. all metal and plastics must be imported), not easily accessible (e.g. due to poor roads), or are partly of poor quality. The heavy dependency of Ethiopian manufacturing on imported raw materials is a noticeable and continuing concern for operations and expansion.

**Operation below capacity:** Another problem for the Ethiopian manufacturing industry is the history of operating below capacity. Collectively, the manufacturing industry utilized only 54.6 percent of its production capacity in 2006/2007 (which represented no significant improvement from the previous fiscal year). Among the industries surveyed by the Central Statistical Agency of Ethiopia (CSA), approximately 84 percent of them operate below 75 percent capacity, while 56 percent operate below 50 percent capacity.

**Table 5: Business survey results for manufacturing industries**

| No | Items | 2005/06 Fourth Quarter | 2006/07 Fourth Quarter | Difference from 2005/06 Fourth Quarter | Percentage Growth |
|---|---|---|---|---|---|
| 1 | Number of establishments | 910 | 910 | | |
| 2 | Persons engaged | 89,590 | 88,946 | (644) | (0.7) |
| | Permanent (in percent) | 86 | 87 | | |
| | Temporary (in percent) | 14 | 13 | | |
| 3 | Revenue from sales (in million Birr) | 3,595 | 4,308 | 713 | 19.8 |
| | Local Sales (in percent) | 92.7 | 93.0 | | |
| | Export (in percent) | 7.3 | 7.0 | | |
| 4 | Reasons for using imported raw materials (%) | | | | |
| | Lack of sufficient supply locally | 16.8 | 16.3 | | |
| | Not available locally | 81.7 | 70.9 | | |
| | Local supply is not reliable | 0.2 | 0.2 | | |
| | Quality of locally available raw material is not reliable | 1.4 | 10.7 | | |
| | Others | 0 | 2.0 | | |
| 5 | Total value of new capital expenditure on fixed assets (in million birr) | 120 | 136 | 16 | 13.3 |
| 6 | Average capacity utilization | 54.0 | 54.6 | | |

**Source:** CSA & Staff Calculation

**Table 6: Reasons for manufacturers working below full capacity**

| Reasons for not working at full capacity | 2005/06 Fourth Quarter | 2006/07 Fourth Quarter |
|---|---|---|
| Shortage of raw materials | 41.1 | 15.3 |
| Shortage of spare parts | 0.9 | 0.9 |
| Shortage of foreign exchange | 1.4 | 0.0 |
| Lack of demand/market | 39.9 | 45.4 |
| Shortage of working capital | 6.3 | 5.9 |
| Problem with electricity and water | 4.0 | 16.3 |
| Repeated breaking of machinery | 2.6 | 3.3 |
| Problem with workers | 0.0 | 0.0 |
| Lack of skilled manpower | 2.1 | 0.0 |
| Government rules and regulations | 0.0 | 0.0 |
| Other reasons | 1.6 | 13.0 |
| **Total** | 100.0 | 100.0 |

**Source:** CSA & Staff Calculation

Among the 699 businesses surveyed, 76 percent have been in operation for more than eight years. The findings of the survey indicated that the lack of domestic and foreign demand is the primary reason for below capacity production. Shortages or irregular supplies of electricity, water, and raw materials also negatively impacted manufacturing performance. None of the industries interviewed mentioned factors such as "problems with workers," "lack of skilled manpower," "government rules and regulations," or "shortage of foreign exchange" as reasons for operating below capacity.[61]

[61] Government of Ethiopia, *Census 2007,* op. cit.

Despite the availability of raw materials and a ready market for industrial products, there has been little development in recent years in manufacturing in Tigray. The Tigray Investment Office's preparation of 180 project profiles was a first attempt to motivate investment in manufacturing (see Appendix 1).

Two entities, namely EFFORT, and to a lesser extent, Dejenna, have been leading efforts to promote manufacturing and industry in Tigray. For a full description of their activities, please refer to Chapter 4.

**Box 13. Manufacturing investment**

**Messebo Cement**
Messebo Cement is the largest corporation in Mekelle. It was established in 2000 through the EFFORT program and occupies a 200 ha site to the north of the city. Messebo currently produces 900,000 tons of cement per year, which should increase to about two million tons/year after a two-year expansion is completed in late 2009. The need for an expansion was borne from increasing demand resulting from a construction boom in the country and increased interest in concrete roads (which offer a 50-60 year life span as opposed to the 10-year timeline of asphalt roads). Currently, 40 percent of total cement production is sold to buyers in Addis Ababa.

Using locally-available volcanic ash, Messebo has been able to increase its productivity by 30 percent recently. The vast majority of its raw material is sourced within 3 km of Mekelle. Iron ore (which is also an important, albeit small, ingredient in cement) is also found within 30km of the city.

With 700 employees, about half of whom have at least a high school diploma, the company can potentially help facilitate the growth of many complementary service-oriented industries in the region (e.g. guard services, trucking companies, etc). However, until there is greater demand, concrete will continue to be sold "at the gate," including the share that is sold to the Addis market.

*Source*: Interview with Messebo Cement General Manager, (April 3, 2008).

**Box 14. Metal and engineering investment**

**Abyssinia Flats Products PLC**
The Kenya-Indian company Ethiopian Steel PLC is the only large-scale foreign investor without previously established ties to the region. Abyssinia Flats Products PLC is the fifth factory established in Ethiopia by Ethiopian Steel PLC. The company is well positioned to profit from the scrap metal reprocessing potential of the Tigray region. The company produces reinforcement bar, angle iron, and flat bars. However, it only produces on a contract basis for wholesalers.

Ethiopian Steel PLC's other factories currently manufacture reinforcement bar, angle iron, channel iron, and cement. In Mekelle, it will manufacture at the rate of 3,500 tons per month with an initial capital cost of US$ 8.5 million (ETB 96 million), 30 percent of which will be financed through its own assets and 70 percent through bank loans.

Although the company is seeking to commence production as soon as possible, there have been some delays in land acquisition. These delays have caused additional costs, including warehouse rental expenses in Djibouti for imported production machines, and the erection of a shed over the construction site to protect it during the rainy season. Ultimately, the 5.5 ha steel reprocessing factory is ideally situated in Mekelle, as it will no longer be necessary to transport scraps to Addis Ababa for reprocessing.

*Source*: Interview with General Manager of Abyssinia Flat Products PLC, (June 3, 2008).

## L. Mining

**Overview**
There is currently minimal investment taking place in the mining sector in Tigray. However, notable mineral and stone deposits indicate the potential for significant mining activities in the future.

**Current status**
Ezana Mining Development has the responsibility to explore and develop mines in Tigray.

**Opportunity**
There is significant opportunity for investment in the mining sector in Tigray. Mineral exploration studies conducted so far indicate that within several hundred kilometers of Mekelle there are significant deposits of:

- Metallic minerals (such as gold, copper, zinc, lead, iron, nickel).
- Industrial minerals (such as silica sand, kaolin, graphite, limestone, and gypsum).
- Dimension stones (such as marble, granite, greenstone, limestone and slate).
- Gemstones (such as agate, jasper, and chalcedony).

In particular, Mekelle and its surrounding area possess large quantities of limestone, marble, clay, dolerites**,** vermiculite (a horticulture medium) and sandstone. Surface salt deposits amounting to 9 billion tons are located on the nearby border with the Afar region. Only 20,000 tons of salt is mined in the region on an annual basis.

**Constraints**
The most immediate constraint to development of a mineral processing facility in Mekelle is the distance of the city from mine sites. Although some sites are closer than others, there are few access roads leading to them. The proximity of prospective mine sites to Mekelle ensure that the city will receive at least tangential benefits, since most mine processing is done at or near the mining site. Another constraint to development is the presence of landmines in some mining areas, particularly near the Eritrean border.

In a similar vein, the length of time necessary to complete environmental impact assessments (typically one year although recent efficiency measures have sought to shorten this process) and the remediation measures necessary for older mine sites (such as the cyanide removal under way in one Derg-era mine), indicate the potential for collateral risk exposure and present the possibility of additional costs.

**Box 15. Mining investment**

**Ezana mining development**
Ezana's main responsibility is to explore the mining potential of the Tigray region. The mineral exploration company possesses the only mineral laboratory capable of detailed sample analysis in Tigray. It was established by EFFORT, the government-initiated investment corporation, with an initial investment of US$ 3.6 million (ETB 40 million). Its main goals are to map the region's resources and pursue extraction. It has a staff of 50.

Currently, there is almost no mining development in Tigray led by the private sector, although two Chinese companies and an Egyptian company have shown interest. Other foreign investors include Ashanti Gold (a Ghana mining company), which is pursuing potential mining claims throughout Ethiopia and would look to systematize the mining process and increase production.

Mining laws at the federal and regional level govern the activities and responsibilities of foreign and domestic investors. After the acquisition of land, the establishment of mining rights is a relatively simple process that requires a one-month newspaper announcement. If no claim to the property has surfaced within this timeframe, an investor can proceed with mining.

**Mekelle Gemstone**
The Mekelle Gemstone factory is still being constructed. Mining will take place in the nearby Afar region while the processing facility, expected to employ 20 technical staff, will be located in Mekelle. Mekelle Gemstone finished the nearly two-year construction of its production facility, located in the Mekelle industrial zone, in early 2009. Although it has experienced some delays in cement acquisition due to the 2008 construction boom, it has benefited greatly from the assistance of Australian partners and the Tigray Investment Office. The company's directors also own a metalwork shop and clothing store which were used as collateral to receive a 50 percent bank loan and avoid any major banking or financing difficulties.

*Sources*: Interview with Ezana Mining General Manager, (February 29, 2008); Interview with Mekelle Gemstone Owner, (May 25, 2008).

## M. Service industries

### 1. Information technology

There are several small-scale firms working in the information and communication technology (ICT) sector in Mekelle, as well as a number of institutions of higher education. The Mekelle Institute of Technology (MIT) is the premiere school in this field; it graduated its first class of 146 students in 2007. The school's focus on electrical engineering, mechanical engineering, information technology (IT), and biogenetics places it in an optimal position to support the city's ICT growth.

## 2. Health and education

There are severe challenges with respect to health and education services in Mekelle. However, the number of private hospitals, clinics and schools are growing and their success shows that there is market demand for services in the social sectors.

# Chapter 4. Mekelle operating environment

## A. Infrastructure

Ethiopia has historically suffered from poor infrastructure development. Due to political divisions, Tigray has been particularly neglected with respect to infrastructure improvement and government-led development projects. However, in the nearly two decades since the fall of the Derg regime, infrastructure improvement has been a primary focus of the regional and federal governments.

## B. Energy

Although Ethiopia has not experienced widespread electricity shortages during the last several years, the first half of 2008 was marked by chronic power outages. At the national level, the Ethiopian Electric Power Corporation (EEPCO) maintains a national grid, the Interconnected System (ICS), which is mainly supplied by hydropower and by the Self Contained System (SCS), which includes isolated diesel units and small hydropower projects. The ICS consists of one geothermal, eight hydropower, and twelve diesel plants with a total capacity of 7.3 MW, 662.6 MW, and 113.44 MW, respectively. However, due to the age of the plants, their combined operating capacity is limited to between 620MW and 780 MW, representing close to 100 percent of the country's energy capacity. The SCS consists of three small hydropower plants and several diesel power plants. Within the SCS, the diesel plants have an aggregate capacity of 32.87 MW, while the hydropower plant produces only 6.15 MW. As of 2008, the company possessed 8,747 km of service lines supplying electricity to roughly 20.3 percent of the country's population. (During power shortages in 2008, Mekelle was supplied by the SCS.) The construction of six additional hydropower stations is expected to alleviate previous energy constraints and the construction of a 120 MW wind power station near Mekelle will be the first of its kind in Ethiopia.

The combination of large-scale expansion throughout rural areas (with huge increases in loss rates as inefficient lines are spread across greater distances), unprecedented urban growth, and an unusually arid dry season led to chronic energy shortages in 2008 throughout Mekelle and the rest of the country. Mekelle itself utilizes 12-13 MW of energy. With the recent shortages, standby diesel plants (decommissioned plants now kept as auxiliary power sources) have been operating constantly. During the most recent shortage, industrial areas, although prioritized to receive electricity during the day, were frequently not supplied with power from 6pm-10pm every night.

Energy rates are set by the Ethiopian Federal House of Representatives, although they are slow to respond to demand or availability. As a result, the Ethiopian system lacks crucial supply and demand controls. However, Ethiopia has aggressively sought to improve its power supply most notably through several massive hydroelectric projects that will come online in the next several years and should help transition the country from an energy deficient country to an energy exporter. The largest of these is the 300 MW Tekeze plant originally scheduled to open in late 2007. Running behind schedule, the plant opened at 75 MW capacity in October 2008. According to EEPCO, full production capacity should be achieved by 2010.

While investment is encouraged in the energy sector, projects rely heavily on foreign technical assistance, although foreign companies themselves are not permitted to directly invest in energy production. However, the future of this policy is uncertain as a European investor is currently developing a 30 MW wind farm in Mekelle. If the European developer is not allowed to operate the facility, EEPCO will simply purchase the constructed wind farm.[62]

### C. Water and sanitation

Water demand far outstrips the city's water supply. In 2008, the maximum demand for water was 23,000 $m^3$/day, whereas the supply was limited to only 11,000 $m^3$/day.[63] The Mekelle Water Supply Office projects that by 2012 the city will need 38,000 $m^3$/ day. Supply limitations are further compounded by the fact that the Mekelle Water Supply Office was recently given additional sewerage responsibilities.

The city currently operates 12 bore holes at a depth of 120-240 meters each. The city is planning to increase its water supply capacity by drilling 11 additional bore holes at a depth between 250 and 350 meters. Long-term plans focus on the potential for dams to offer the most dependable source of water for the city.[64] The Gaba River to the immediate northwest of the city would, in conjunction with a treatment plant, provide sufficient water for the future needs of the city. Due to the city's heavy rainfall during the rainy season (particularly in May, June, and July), rainwater harvesting at the Gaba damn could represent a viable means of water storage.

Currently, the water supply office informs businesses when shortages are imminent. In case of shortages, they request that businesses keep a two-to-three day reserve. Some businesses have a water truck for this purpose while large industries, such as Maa Garment and Messebo Cement, prefer to operate their own wells.

The status of liquid waste management in Mekelle is also less than ideal. With no centralized network (other than a 19 km closed and 11.6 km open ditch built for storm water drainage), the city relies on the services of four registered vacuum trucks operated by private companies. As a rule of thumb, waste management is the responsibility of each individual company. However, few companies in Mekelle possess waste treatment facilities, other than Sheba Tannery, Desta Alcohol and Quwir Garage. When questioned about this, most businesses cite a closed loop industrial cycle that utilizes waste or scrap material.

Solid waste management in Mekelle is currently undergoing a period of reorganization. The City's Business Process Reengineering Team will implement its recommendations in 2009 to improve industrial and residential waste management. Governmental policy currently requires industries to pay for their waste disposal. As a result, most businesses contract outside private collection companies that rarely practice proper waste management techniques of hazardous and industrial solid waste. These companies typically dump the waste in open dumping sites or landfills. The residential collection rate is between 35 and 50 percent.[65]

[62] Interview with EEPCO Tigray Regional Director, (April 24, 2008).
[63] Based on projections provided by Mekelle Water Supply Director, (April 20, 2008).
[64] Interview with Mekelle Water Supply Director, (April 20, 2008).
[65] Interview with Sanitation Department Head, (March 14, 2008).

## D. Transport

Ethiopia's surface transport infrastructure, primarily consisting of roads, is inadequate and underdeveloped. In fact, Ethiopia has the lowest road density per capita in the world. Only 21 percent of highways are paved, with few interconnecting roads between adjacent regions, and a grossly insufficient feeder road network. As a result, large parts of Ethiopia remain isolated and largely dependent on pack animals or human transport. Limited rail service links Addis Ababa with Djibouti via the eastern Ethiopian city of Dire Dawa, although it is currently undergoing extensive repairs. However, air service is widely regarded as being among the best in Africa with domestic passenger and cargo air transport service provided by Ethiopia Airlines. Ethiopia Airlines has international flights that link the country with 53 cities on five continents, and its domestic service links 43 airfields and 21 landing strips with Addis Ababa.[66] With the recent addition of an internationally certified airport capable of servicing all passenger and cargo needs, Mekelle has added a vital element for international competitiveness. As a result, Ethiopia now possesses over a half dozen international standard airports.

On the national level, much emphasis has been placed on upgrading the existing main road that connects Tigray with the port of Djibouti, Addis Ababa and other main regions. In the Tigray region alone, there is a total of 5,900 km of roads; 1,419 km of which are administered by the Ethiopian Road Authority (ERA), and 1,131 km administered by the Tigray Region Road Authority (TRRA). The remaining 3,349 km is dry weather community road. The road density of the region rests at 47.22 km per 1,000 square km of land.

The city of Mekelle has 263 km of roadways, of which 40 km are asphalt roads, 63 km are gravel roads and the remaining 160 km are unclassified dirt roads. An additional 88 km of asphalt roads are being planned. Only 24 km of asphalt roads are rated in "good" condition by the Department of Roads, while the remaining 16 km are rated in "poor" condition and require maintenance. Mekelle has street lighting that covers 180 km. Of this amount, 30 km are sodium lights, 60 km are florescent, and 60 km are incandescent. In addition, large-scale cobblestone projects are underway to convert 30-40 km of dirt roads into cobblestone streets in the heart of the city.[67]

**Table 7: Transport distances from Mekelle and Addis Ababa**

| | **PORT SUDAN** | **MASSAWA** | **ASSAB** | **DJIBOUTI** | | | **BERBERA** |
|---|---|---|---|---|---|---|---|
| **MEKELLE** | *1788 km via Kasala, Metema, Azero, Weldia* | *391 km via Asmera, Adigrat* | *899 km via Eli Dar, Kombolcha, Weldia* | *940 km via Kombolcha, Weldia* | *837 km via Mile, Chifra, Alewha* | *680 km via Serdo, Afdera, Shiket, Mekelle* | *1736 km via Addis, Kombolcha, Weldai* |
| **ADDIS ABABA** | *1881 km via Metema, Azero, Anjibara* | *1163 km via Mekelle, Weldai, Kombolcha* | *869 km via Kombolcha* | *910 km via Gelafi* | | | *964 km via Dire Dawa* |

*Source*: Tigray Investment Office, *Tigray Investment Guide* (Tigray, Ethiopia: Tigray Investment Office, 2008).

[66] Government of the United States, *Doing Business in Ethiopia: A Country Commercial Guide for US Companies*, (Washington, DC: US Commercial Service, 2007).
[67] Interview with Road and Construction Department Head, (March 14, 2008).

## E. Telecommunications

The Tigray region, for the most part, has reliable access to telecommunications (fax, internet, mobile, etc.). In addition, cooperation with Chinese technical assistance groups is improving saturation and service delivery. Internally, direct microwave telephone links are available in most regional cities; a number of smaller towns also have automatic telephone services. International communication is maintained through two satellite earth stations that provide telephone, telex, and television services. Digital telephone exchanges, mobile telephone and internet services have also been installed recently.[68] The Ethiopian Telecommunications Corporation has begun an US$ 133 million (ETB 1.5 billion) expansion project through a vendor-financing scheme with the Chinese company ZTE.[69]

## F. The financial sector

The National Bank of Ethiopia (NBE) is the country's central bank. Commercial banking takes place through the Commercial Bank of Ethiopia (CBE) and a number of private banks (with Dashen Bank offering the most advanced services, followed by Wegagen Bank, Abyssinia Bank, United Bank, Awash Bank, and Lion Bank). The CBE and the private commercial banks offer savings and checking accounts, short-term loans, foreign exchange transactions, and mail and cable money transfer services. They also participate in equity investments, provide guarantees and perform other commercial banking activities.

Nine commercial banks (three government-owned and six private) currently operate within Ethiopia. These include two specialized banks, the Development Bank of Ethiopia (DBE) and the Construction and Business Bank (CBB). The DBE, with its 32 branches, extends short, medium and long-term loans to viable development, industrial and agricultural projects. The CBB provides long-term loans to construction developers (for home construction materials such as concrete blocks, roofing materials, etc.). It also funds the construction of private schools, clinics, hospitals and other real estate.

Foreign banks have not yet been allowed to enter the finance sector. According to the Government, this will remain the case until such time as domestic banks have attained greater competitiveness and the NBE's supervisory and regulatory capacity is strengthened. Private banks operating in the capital and other major cities include Awash, Dashen, Abyssinia, United, Wegagen and Nib. In addition to banks and insurance companies, micro-finance institutions play an important role in providing credit and saving facilities. There are now more than 20 microfinance institutions operating in different regions of the country. Notably, the largest microfinance institution in Africa, the Dedebit Credit and Savings Institution (DECSI), is based in Mekelle. It manages 98 savings and credit agencies and has a staff of approximately 1,300 people.

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[68] Government of the United States, *Doing Business in Ethiopia*, op. cit.
[69] Government of the United States, *Ethiopian Investment Climate* (Washington, DC: US Department of State, 2007).

Foreign enterprises formally registered in Ethiopia are entitled to access domestic credit on the same terms and conditions as Ethiopian companies. Exporters, including foreign enterprises, may also have access to external loans and suppliers' or foreign partners' credit in keeping with the directives of the NBE. Foreign investors must have their investment capital, external loans and suppliers' or foreign partners' credits registered with the NBE.

Ethiopia does not have a securities market, although a private sector initiative to establish a mechanism for buying and selling company shares is under discussion. While credit is available to investors on market terms, the 100 percent collateral requirement limits some potential investors. Export-oriented investors can borrow from the special fund at the DBE without one-to-one collateral for an amount of up to 70 percent of the project cost. The CBE holds approximately two-thirds of the assets of the entire banking system.[70]

## G. Mekelle Industrial Zone

The current industrial zone is located on the northern edge of Mekelle and has been recently expanded with the addition of 22 ha for heavy industry. The expansion was prompted by the rapid allocation of the original 60-ha site to small and medium-sized enterprises (SME). While indicative of the interest in entrepreneurial activities, it is important to note that the original area was provided at a highly reduced rate of US$ 0.07 (ETB 0.75) per $m^2$/year. Since 2006, only 20 percent of planned businesses have begun operation.[71] Each SME was allocated on average 1 ha.

The Tigray Investment Office is in the process of creating a heavy-duty industrial zone consisting of 500-600 ha that would be located in the area immediately southwest of the 200 ha Messebo cement factory. 80 ha were slated for development during the 2008/2009 fiscal year. The Mekelle Department for City Planning will administer the area while the Tigray Investment Office will provide technical support. Only 16 of 80 ha had been allocated as of June 2008,[72] allocated mainly to the following four companies: Abyssinia Flats Products PLC, the EFFORT Corporation's Mesfin Industrial Engineering company, Dejenna's Abergelle Slaughterhouse, and the Dejenna Romanat Laminate factory.

Significant World Bank funds are also being made available for infrastructure improvement in Tigray. The German Development Agency (GTZ) is working closely with the local government to ensure the effective use of funds. Part of this work involves executing an extensive infrastructure inventory. This report will be updated periodically to provide the most current information on Mekelle's infrastructure, and will be available at the Tigray Bureau of Trade and Industry.

## H. Land administration

Under Ethiopia's land tenure system, the Government owns all land and provides long-term leases to tenants. As land is public property, individuals, companies and other organizations have only the right of land use. Peasant farmers are placed in a separate category and are granted use rights for an indefinite period. They also have the right to transfer the land to legal heirs and to

[70] Ibid.
[71] Interview with Tigray Investment Office Head, (April 24, 2008).
[72] Ibid.

lease it to third parties. However, the maximum limit on rural landholding has been set at 10 ha per household. There are two broad classifications of land for lease purposes: rural land and urban land, of which rural land is leased mainly for agriculture. Abandoned and unused government land is primarily available for investment.

The lease price of rural land is generally very low, but its use is limited by infrastructure. Although there is some rural land with developed infrastructure in proximity of markets, such land is usually only available to farmers living within 100 km of major cities. The Government does retain the right to relocate peasant farmers from land to which they have use rights. Although the process by which this occurs varies, all parties appear sensitive to the need to have just compensation and fair dealings when interacting with rural farmers. The farmers are compensated by the Government (in 2008 at the rate of US$ 8,500 (ETB 96,000) per ha for permanent expropriation). This sort of land is provided to investors in floriculture and horticulture at very reasonable lease rates.

Urban land is divided into land for industrial use and land for other activities. Industrial land is often prioritized by the Government and the necessary infrastructure (roads, electricity, water, telephone) is facilitated. Industrial land in Addis Ababa and in parts of the Tigray, Amhara and Oromia regions are available at low fixed prices. Land for export-oriented industries is also generally available at very low rates. The Ethiopian Investment Agency (EIA) now has the power to facilitate the acquisition of land by FDI projects throughout the country. Urban land for other activities is available on an auction basis. In principle, the lease value of the land, as well as the fixed assets on it can be mortgaged or pledged as collateral, and banks may accept such collateral, although typically at a discounted rate. In practice, these transactions are slow and not very efficient.[73]

In Mekelle, the Office of Land Administration is housed at the main municipal building. The Department Head oversees the transfer and title authorization of land. The Department Head at the City Planning Office oversees large land transfers. Individuals leasing land are given a certificate of possession for a fixed lease period (certificates are of varying lengths).

In order for an investor to request land, the procedure is as follows:

1) A project proposal is submitted to the land administration office.
2) The submitted proposal is sent to the team leader to determine feasibility.
3) The proposal is forwarded to the urban planning office.
4) The investor receives a notice regarding potential allocation of requested land.

Land lease costs depend on the type of the investment. If at least two of the three criteria are met, then the investment is determined to have high socio-economic value and land is made available at a rate of US$ 0.07 (ETB 0.75)/$m^2$. The three criteria for determining socio-economic value are: (1) the project must be labor intensive, (2) the project must involve new technology, and (3) the investor must possess a minimum starting capital amount of ETB 40 million (approximately US$ 3.6 million), although indications suggest that this requirement is not strictly enforced. Once

[73] UNCTAD. *Investment Policy Review,* (Geneva: UNCTAD, 2004).

an investor has been approved through this process, leases are typically transferred by the city administration within two months.[74]

## I. Human resources

Visitors are often impressed with the quality of the country's labor force, which is estimated at 35 million. 85 percent of the labor force are employed in subsistence agriculture. The government and armed forces are the most important sectors of employment outside agriculture and provide work for almost three million people. The number of permanent and temporary workers employed in public sector manufacturing increased from 78,000 in 1978 to over 300,000 by 1999. Approximately 40 percent of the urban workforce are unemployed. High urban unemployment is partially offset by an informal economy. While labor remains readily available and inexpensive throughout Ethiopia, skilled manpower is scarce in many fields. Further, only about 300,000 workers are members of labor unions (civil sector employees are not allowed to form unions). Ethiopians also have a good understanding of English, which is mandatory for all students starting in middle school. High school classes are also taught in English.[75]

## J. Bureau of Capacity Building

Ethiopia's Bureau of Capacity Building aims to improve Ethiopia's development prospects in four areas: (1) by reforming rules and regulations at a regional and municipal level; (2) by helping meet human resource needs, including by training civil servants (the bureau has trained 60,000 civil servants since its inception in Tigray several years ago), processing complaints and evaluating salary scales; (3) by promoting good governance as established by World Bank standards; and (4) by supporting ICT expansion and the creation of e-government tools such as video conferencing and computer documentation.

The offices of the Bureau of Capacity Building include 80 permanent employees and 10 UN volunteers with 34 offices in 11 major towns. The office has spent US$ 22 million since its inception in 2006. Reform efforts include tax and justice reform, urban capacity building, financial management reform, revenue collection, and technical vocational education (TVE), which targets small and medium enterprises and provides entrepreneurial skills training. These reform efforts follow the BPR model.[76]

Human resource reforms have primarily emphasized improving job evaluation, management reform, computerized systems, and revenue collection. Good governance programs have largely focused on improving governmental responsibility and efficiency and promoting privatization. The Office of Capacity Building seeks to include the private sector in areas previously reserved for government control. This is a frequent feature of many BPR efforts.

ICT efforts by the Bureau of Capacity Building overlap with other national e-government and technology implementation measures, including extensive videoconferencing at most levels of government with a special emphasis on using videoconferencing to assist court adjudications. Computers have been introduced at all levels of government and training efforts are helping to

[74] Interview with Head of Department of Urban Planning, (April 19, 2008).
[75] Government of the United States, *Ethiopian Investment Climate.* op. cit.
[76] BPR is a management approach aimed at improving the efficiency and effectiveness of an organization through redesigning the way work is done to better support the organization's mission and reduce costs.

ensure their effective utilization. UN volunteers are heavily involved in this area, especially in Mekelle, Shire, and Adigrat.[77]

## K. Tigray Bureau of Rural Development and Agriculture

The Tigray Bureau of Rural Development and Agriculture oversees cereal crop production, regulation, livestock, and irrigation. It also maintains a Natural Resource Development Department that focuses on soil conservation and forestry, and an Agriculture Input and Marketing Department that supplies modern inputs to promote urban-rural linkages and agriculture-based cooperatives.

The Bureau of Agriculture maintains a close relationship with the Bureau of Trade and Industry, as many of their activities overlap. Because the region stretching from Samera to Raya, 60 km south of Mekelle, is ideal for cotton production, the two Bureaus are developing plans to promote cotton, Tigray's second largest export after edible oilseeds. Because it is non-perishable and packable, cotton is not as susceptible to the problems of a landlocked arid region with concentrated periods of rainfall. For similar reasons (i.e. geography and climate), the Bureau of Agriculture has also delineated an area near Mekelle for gum arabic production. Flowers and animal feed processing are also markets that the Bureau of Agriculture expects to support heavily in the coming years.[78]

## L. International development efforts in Mekelle

The German Development Agency (GTZ) has dedicated a substantial number of staff to help implement World Bank projects in Ethiopia. The 19 largest cities in the country have already received assistance from the World Bank, including four in Tigray. The four Tigray cities of Mekelle, Adigrat, Axum and Shire are also supported by the Construction and Urban Development Bureau (BWUD) of the Regional State of Tigray. To help implement the project, the Bureau established a regional committee for Tigray, directed by the deputy head of BWUD's planning department. The committee consists of a civil engineer from BWUD, and three experts from the GTZ-UGDP Tigray team. Each region in Ethiopia that receives World Bank funding receives this type of support from GTZ. GTZ further supports the urban sector by directing urban studies and assisting in the development of policies and programs, as part of the first phase of the World Bank-funded Urban Governance and Decentralization Programme (UGDP).

The main goals of the program are (1) to enable cities to provide better services to their citizens, and (2) to promote good governance. The first phase of the program is being implemented currently (2008-2011) and includes the cities of Mekelle, Adigrat, Axum and Shire/Indaselassie. Currently, the cities are working to prepare 3-year capital investment plans (CIP) to cover the first phase of the program and demonstrate capital investment needs. The CIP is being prepared with public and private input from various Kebeles (the smallest administrative units) throughout Mekelle, with input and discussions with various government departments and officials. A primary purpose of the CIP is to provide officials and citizens with a process for planning and

[77] Interview with Director of the Bureau of Capacity Building, (May 22, 2008).
[78] Interview with the Natural Resources Department Head at the Tigray Bureau of Rural Development and Agriculture, (May 30, 2008).

budgeting in accordance with capital investment needs and to make the best use of scarce financial resources.

Changes over the next several years can be expected as local governments seek to maximize regional and municipal resources to promote more efficient city governance. This process is expected to result in improved tax collection, which should improve the capacity of the Government to fund public works projects. The implementation record so far has been positive as evidenced by an asset management project to create GIS cadastral maps for the city.[79]

Other notable international organizations currently working in Mekelle include the World Food Program (WFP) and the United Nations Mission to Ethiopia and Eritrea (UNMEE). The World Food Program began operations in response to repeated famines in Tigray and established a regional office in Mekelle through which they organize large food movements and provide food security support. The UNMEE was established after the 1998-2000 Ethiopian-Eritrean War in response to simmering hostilities between Ethiopia and its neighbor to the north. However, UNMEE has struggled in its mission to improve border relations between the two countries.

## M. Holding companies in Mekelle

The private sector in Mekelle is dominated by domestic companies with the EFFORT and Dejenna companies functioning as the primary players in the Mekelle economy. In May 2009, the two companies merged, which should lead to greater efficiency among the respective companies. For the purposes of this report, however, we refer to the two companies separately since the merger is recent and no public documents are yet available specifying changes in the company structures.

Additionally, SMEs are given extensive government support and play a crucial role in some light industry and service oriented businesses.

### 1. EFFORT Corporation[80]

The EFFORT Corporation was one of two large government-initiated investment entities committed to sustainable development through successful competition in the global market. EFFORT explores and invests in specific business opportunities in order to promote regional economic development.

More specifically, EFFORT establishes manufacturing and service businesses that utilize locally available raw and semi-processed materials. Frequently, this mandates production of goods and services employing labor-intensive capital (thus creating employment opportunities and reducing production costs) and involvement in agro-industries. Since the 2002 economic downturn, EFFORT has sought to revitalize its companies through streamlining and emphasizing its most profitable production areas. The corporation is seeking joint partnerships with foreign investors.

Currently, there are 13 EFFORT Endowment Companies including: Addis Pharmaceutical Factory, Almeda Textile, Experience Ethiopia Travel, Express Transit Service, Ezana Mining

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[79] Interview with GTZ Engineering Officer, (March 28, 2008).
[80] Interview with EFFORT Business Development Department Head, (May 4, 2008).

Development, Guna Trading House, Hiwot Agricultural Mechanization, Mesfin Industrial Engineering, Messebo Building Materials Production, Saba Dimensional Stones, Sheba Tannery, Sur Construction, and Trans Ethiopia.

### 2. Dejenna Endowment

The Dejenna Endowment was founded in 2004 to develop agricultural and natural resources in Tigray. Its organizational structure is identical to EFFORT in that it is a foundation with a number of limited companies under its control. Dejenna receives funding from several sources including the Government and various NGOs. Dejenna operates with a board and CEO to whom each of its companies must submit evaluation reports. Dejenna controls all high level hiring for its companies, although its day-to-day operations are autonomous. Other companies that should be established under Dejenna in 2009 include a flower production center, a wood briquette factory that utilizes waste products from particle board, a dairy processing facility that works closely with the Abergelle Slaughterhouse, and a plastic packaging factory for concrete.[81]

There are currently seven Dejenna Endowment Companies: Abergelle Livestock Abattoir and Fattening, Alaje Forest Development, Bruh-Tesfa Plastic Products, Dimma Honey, Maichew Particle Board, National Geo-Textile Gabion Factory, and Plant Tissue Culture.

## N. Doing business in Mekelle

There are a number of agencies in Mekelle that help facilitate investment, including the Tigray Investment Office (TIO), Tigray Agricultural Marketing Promotion Association (TAMPA), Tigray Development Association, and Mekelle Chamber of Commerce.

### 1. Tigray Investment Office (TIO)

The Tigray Investment Office operates as the official licensing body for all domestic investment and assists foreign investors once the Federal Ethiopian Investment Commission has issued an investment license. One of the agency's main responsibilities is the oversight of nine industrial zones throughout Tigray. The agency also helps promote industrial investment in the city.[82]

### 2. Tigray Agricultural Marketing Promotion Agency (TAMPA)

The Tigray Agricultural Marketing Promotion Agency was established in 2004. Its main objective is to provide a rural development strategy to increase crop values, and improve the efficiency of farms throughout the country. TAMPA is comprised of three departments: (1) Market Research and Information; (2) Market Infrastructure and Promotion; and (3) Contract Farming and Farming Coordination. TAMPA is a semi-autonomous governmental body that reports to a Board of Directors composed of various governmental offices including the Director of the Regional Business, Trade, and Industry Office. The Board's chairperson is the Tigray Regional President.[83]

TAMPA carefully tracks supply and demand prices for all agricultural products in the Tigray region and provides the most accurate and up-to-date information for agro-processing ventures in

[81] Interview with Dejenna Business Development Office Head, (May 5, 2008).
[82] Interview with Tigray Investment Office Head, (March 16, 2008).
[83] Interview with TAMPA Director, (April 3, 2008).

Mekelle. The company also provides assessments of competitors. In late 2008, TAMPA produced their first due diligence reports on potential value-added industries. It is utilizing communication sources including radio, Internet, newspapers, newsletters, and notice boards to disseminate information.

Currently, the avenues available for the promotion of investment in Tigray are limited to Ethiopian Embassies and academic networks through Ethiopia's rapidly expanding university system. Through these networks and through targeted outreach, TAMPA has signed several contracts with foreign investors for property and production rights. TAMPA also assists investors with visits to Ethiopia. Further, the agency sent eight Ethiopian companies to India in May 2008 in order to promote agro-processing opportunities. [84]

### 3. Tigray Bureau of Trade and Industry

The Bureau of Trade and Industry places an emphasis on improving good governance, service delivery, and infrastructure. It maintains 40 SME branch offices throughout Tigray. The Trade and Industry office also offers loan facilitation through DECSI, the micro-finance institution. These loans are provided at an interest rate that is 3 percent lower than the average private loan. Loans are approved on the basis of submitted project profiles.

ICT incubation centers have also been established to help expand the IT industry in Mekelle. Currently, several dozen companies are given space in a 700 $m^2$ office and given project-based subsidies as well as a two-year grace period on equipment and building usage. These centers are financed through World Bank funds. After the two-year sponsorship, recipients of these funds must help train the center's next occupants. Tigray is the only region in Ethiopia with ICT incubation centers.

Other approaches adopted by the Bureau of Trade and Industry include cluster development as defined (and funded) by the United Nations Industrial Development Organization (UNIDO). This approach provides for "cooperation within competition" through the use of bulk purchasing of raw materials, and the provision of government contracts without tender for light industry and service-oriented businesses in metal and woodworking. The promotion of SMEs has shown positive results over the last several years, including through the creation of a Business Development Service to advise the SME sector. As of 2007, there were 72,000 SMEs in Tigray, although this number is expected to rise to over 100,000 by 2009.[85]

### 4. Tigray Development Association

The Tigray Development Association does not work primarily in investment promotion, but does help coordinate an extensive network of Ethiopian Diaspora members. While diaspora members are typically registered as domestic investors, they are able to access foreign capital and serve as an important bridge to foreign communities.[86]

[84] See the TAMPA website for more information at www.agrimartg.org.
[85] Interview with Bureau of Trade and Industry Director, (May 28, 2008).
[86] See the Tigray Development Association at www.tdaint.org.

## 5. Mekelle Chamber of Commerce

Finally, the Mekelle Chamber of Commerce is another conduit for investment promotion. The Chamber receives support from the Friedrich Ebert Foundation, a German development organization. One of the agency's major objectives is to develop independent and standardized review mechanisms for accessing credit from local banks.

## Chapter 5. Conclusion

The Millennium City of Mekelle has much to offer to potential investors – it is expanding rapidly, and has cheap labor, a strong educational system, and a business friendly environment. The Governments of the Regional State of Tigray and Mekelle City are also undertaking a number of important initiatives to overcome current investment constraints.

A number of viable investment opportunities have been identified in Mekelle, particularly in agriculture and agro-processing including livestock and honey, fruits and vegetables, dairy, meat and leather. Further opportunities abound in tourism, cotton and textile production, floriculture, spices, and mining. Mekelle and Tigray have also been helped by government decentralization efforts over the last several years that have placed greater emphasis on export-oriented activities.

In short, although Mekelle is facing many challenges to improve business activity and attract greater investment, it is an attractive place to invest and is poised to grow in the coming years.

# Appendix 1: Project proposals available at Tigray Investment Office

*(The Tigray Investment Office has project profiles and development plans for the following industries available for a nominal fee)*

***TEXTILES***
*Children's Clothing*
*Mosquito nets, sports nets and fishing nets*
*Nylon zip fastener*
*Tape for spindles and nylon zip fasteners*
*Canvas-based products*
*Gauze and Bandage*
*Absorbent cotton and sanitary pads*
*Sewing thread*
*Carpet*
*Acrylic yarn*
*Canvas shoes*
*Blankets*
*Lint, cotton and Edible oil production*

***LEATHER***
*Collection and Preservation of hides and skins*
*Laminated leather belts*
*Leather goods*
*Leather jackets*
*Leather footwear*
*Lather board*

***FOOD AND BEVERAGES***
*Margarine*
*Canned fruit*
*Dehydrated fruits*
*Tomato ketchup and sauce*
*Marmalade production from cactus*
*Dressed and packed chicken*
*Iodized salt*
*Carbonated beverage / lemonade*
*Mineral licks*
*Powdered Milk*
*Baby food*
*Composite flour*
*Corn flakes*
*Vinegar*
*Beef in jelly*
*Spices*
*Pasteurized milk, butter, and cheese*
*Wine*
*Purified water*
*Baker's yeast (instant dry yeast)*
*Macaroni, pasta and biscuits*
*Livestock feed*
*Poultry feed*
*Processed honey*
*Potato chips*
*Mini brewery (beer)*

***WOOD AND PAPER PRODUCTS***
*Pencil and wooden ruler production*
*Toothpicks, tongue depressors, wooden ladles and Forks*
*Gummed paper and Stickers*
*Handmade paper and egg trays*
*Aluminum foil*
*Paper tubes and cones*
*Corrugated paper board*
*Cement paper bags*
*Toilet paper*
*Exercise books*
*Sanitary Napkins*
*Paper Envelopes*

***CHEMICAL, PLASTIC & RUBBER***
*Plastic chairs, tables and stools*
*Plastic house hold goods*
*Varnish*
*Plastic Gutters, down pipes & conduits*
*Melamine tableware*
*Artificial Leather*
*Plastic strips*
*Hydrogen peroxide*
*Rubber Stoppers*
*Car batteries*
*Red Oxide paint*
*Masking and cellophane tape*
*Automotive paint*
*Chrome sulphate*
*Sodium sulphate*
*Thinner*
*Oral rehydration salts (ORS)*
*Bees wax production*
*Calcium carbide*
*Distilled water*
*Plastic zippers*
*PVC floor tiles and coverings*
*Fertilizer from bone meal*
*Cement waterproofing compounds*
*Veterinary Medicine*
*Surgical gloves*
*Sodium hypo chlorite*
*Caustic soda*
*Glucose Production*
*Automobile rubber parts*
*Glue production*
*Shoe polish*
*Polypropylene film bags*
*Paint brushes (flat)*
*Injection moulded plastic education materials*
*Sodium silicate*
*Rubber molding*
*Non-soap detergent bars*
*Electrical lights, switches and wall sockets*
*Plastic buttons*
*Printing ink*
*Urea resin adhesive*
*Adhesive tape*
*Incenses sticks*
*Insecticides, Herbicides and Fungicides*
*Cleaning powder*
*Chlorine*
*Detergent powder*
*Glycerin, hair oil, shampoo and perfume*
*Surgical adhesive tape*
*Medical syringe*
*Gaskets and 'O' rings*
*Albums, file covers, file folders and wallets*
*Flash light Torch*
*Slippers production*
*Rubber Soles and heels*
*Polyurethane foam*
*Combs, hair brushes and hair grips*
*Plastic woven sacks*
*Nylon twin rope*
*Feeding bottles and nipples*

***NON-METALLIC MINERAL***
*Mosaic tiles*
*Grinding wheels*
*Lime*
*Calcinated gypsum*
*Cement tiles*
*Disk brake lining*
*Refractory bricks*
*Sheet glass*
*Glass bottles and tumblers*
*Chalk*
*Plaster of Paris*
*Ceramic Sanitarywares*
*Cement poles*
*Roof Tiles from clay*
*Gemstones*
*Ceramic table ware*

***METAL AND ELECTRO-MECHANICAL***
*Springs and coils*
*Radiators, fuel tanks and silencers*
*Cans for Packing*
*Aluminum frame and profiles*
*Saw blades*
*Hand pumps*
*Pipe fittings and valves*
*Sliding doors and folding gates*
*Small automotive parts or accessories*
*Tubes and pipes*
*Brass hardware*
*Simple workshop machines (bench grinder, hand drill and electric cutter)*
*Filter element for Vehicles*
*Hospital beds, stretchers and wheel chairs*
*Radio set assembly*
*Sprinklers*
*Snap fasteners and metallic buttons*
*Aluminum wares (milk Container, cream churners and cookingware)*
*Shock absorbers*
*Hand and machine sewing needles*
*Mesh wire, gabion wire and light guards*
*Chrome (Electro) plating service*
*Hypodermic Needles*
*Farm implements (shovels, spades, and rakes)*
*Fencing net, barbed wire & bed springs*
*Metallic Containers*

*Low Cost transport vehicles*
*Umbrella*
*Roofing nails*
*Metallic shop accessories and belt fasteners*
*Wood screw and rivets*
*Hinges lock and Padlocks*
*Welding Electrodes*
*Bolt and nuts*
*Steel wires*
*Fluorescent fixtures production*
*Water flow meter production*
*Pilfer proof caps production*
*Staplers, punchers and staple removers*
*Insulated wires and cables*
*Metallic sanitary fittings*
*Concrete mixers, hollow block making machines, oil press machines and bakery ovens*
*Razor blades*
*Solar cookers and solar water heaters*
*Grain dryers, seed cleaners and seed treaters*[87]

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[87]Source: Tigray Industry, Trade and Transport Bureau. For more information, see: www.tigrai.org/development/index.htm

## Appendix 2: Guidelines for environmentally sound investments[88]

**General guidelines**

1) The proponent is responsible for complying with the requirements of the environmental impact assessment process.
2) The proponent may appoint an independent consultant and/or a multi-disciplinary group of consultants.
3) The proponent is responsible for all associated costs incurred when following the EIA process.
4) The proponent must ensure that adequate participation of the competent agency and any other interested or affected parties has been carried out.
5) When an impact assessment report is completed the proponent shall be responsible for ensuring its approval.
6) Based on environmental impact assessment proclamation number 299/2002 of Ethiopia Article 7 sub-article 1, the proponent shall submit the environmental impact assessment report to regional environmental protection authority.
7) The regional environmental authority decision is expected before implementation and the authority shall give a response to the report.

**Environmental impact assessment**

**Background of the project proposal**

- Size and nature of development.
- Description of project alternatives.
- Sources, types, characteristics and volume of raw materials.
- Time schedule for phasing of development, i.e., construction, operation, maintenance, decommissioning.
- Description of technological processes.
- Byproducts, output.
- Removal and disposal of waste.
- Human and resource material cost.

**Environmental baseline information**This section should provide a detailed assessment of the environment that will be affected by the development. Some of the elements to include are the following:

- Area specific information such as land tenure, surrounding land uses, physical constraints, infrastructure services in and around the project.
- Boundaries of the project and its impact on the environment.
- Qualitative and quantitative biophysical environment data, e.g., climate, soil, geology, hydrology, topography, flora and fauna.
- Qualitative and quantitative socio-economic data such as demographic indices, standard of living, infrastructure services, housing, energy and water supply.
- Cultural and historic environment description.
- Project area maps, figures and others.

[88] This section draws on Tigray Investment Office, *Tigray Investment Guide*, op. cit.

**Analysis of the environmental impacts**

This section will identify, predict and evaluate impact, both negative and positive. With regard to each impact, the following elements should be included:

- Criteria used for determining significance of impact, e.g., magnitude, geographic, extent, duration, frequency, reversible or irreversible, risk or uncertainty, size of affected group.
- Brief description and analysis of each impact such as nature, significance, and extent.
- Description of affected stakeholders in and around the project area.
- A comparison of proposal options.
- Impact of the project on the current, future or previously affected ecosystem.
- Potential accident or hazard scenarios covered in the assessment.
- Degree of confidence in prediction.

**Description of mitigation measures**

This section will formulate mitigation measures for each impact and indicate resource allocation to achieve stated measures. Elements to be included:

- Preventing, reducing or minimizing impact before they occur.
- Eliminating an actual impact over time by incorporating appropriate maintenance measures.
- Rectifying an impact by repairing, rehabilitating or restoring the affected ecosystem.
- Compensating appropriately for an impact both for human beings and the environment.
- Maximizing beneficial impacts through specific additional actions.

**Preparing environmental management plan**

This section should include the following elements:

- Description of the proposal for mitigation measures.
- Schedule for implementation of mitigation measures.
- Cost estimate of mitigating measures.
- Capacity building action plan preparations on human and material resources.
- Description of stakeholders or parties, who are responsible for implementing mitigation measures.

**Monitoring the efficacy of mitigation measures**

This section should include:

- A reporting schedule to the appropriate environmental protection authority.
- Methods of monitoring should be described.

**Conclusion and recommendation**

This section will sum up the report and detail the steps necessary to move forward.

# Appendix 3: Legal framework for investments[89]

| Federal laws and regulations | |
|---|---|
| **Name** | **Area** |
| **Investment laws** | |
| Proclamation No. 375/2003, A Proclamation to Amend Amended Law governing investment the Investment Re-enactment Proclamation No. 280/2002 | Amended law governing investment |
| Proclamation No. 280/2002, Re-enactment of the Investment Proclamation | Law governing investment |
| Council of Ministers Regulation (No. 84/2003) on Investment Incentives and Investment Areas Reserved for Domestic Investors | Regulation governing investment incentives and reserved areas |
| **Trade, taxation, finance, and insurance laws** | |
| Commercial Code (Proclamation No. 166/1960) | Law governing company formation, operation, dissolution, etc. |
| Civil Code (Proclamation No. 165/1960) | Law governing various types of contracts |
| Maritime Code (Proclamation No. 164/1960) | |
| Proclamation No. 67/1997, Commercial Registration and Business Licensing Proclamation | Law governing business registration and licensing |
| Federal Government Commercial Registration and Licensing Regulation No. 13/1997 | Regulation governing procedures for business registration and licensing |
| Proclamation No. 123/1995 Concerning Inventions, Minor Inventions and Industrial Designs | Law governing the protection of inventions, utility models and industrial designs |
| Council of Ministers Regulation No. 12/1997, Inventions, Minor Inventions and Industrial Designs Regulation | Regulation governing patents, utility models and industrial designs |
| Proclamation No. 227/2001, A Proclamation to Amend the Income Tax Proclamation (No.173/1961,as amended) | Law governing tax identification number, tax withholding, directives and penalties |
| Proclamation No. 286/2002, Income Tax Proclamation | Law governing income tax |
| Proclamation No. 283/2002, Value Added Tax Proclamation | Law governing value-added tax |
| Proclamation No. 20/2002, Excise Tax Proclamation | Law governing excise duties |
| Proclamation No. 249/2001, A Proclamation to Provide for the Establishment of Export Trade Incentive Scheme | Law governing duty drawback, voucher and bonded manufacturing warehouse incentive schemes |
| Proclamation No. 83/1994, Monitory and Banking Proclamation | Law governing the powers & duties of the National Bank |
| Proclamation No. 84/1994, Licensing and Supervision of Banking Business Proclamation | Law governing the licensing and supervision of banks |
| Proclamation No. 86/1994, Licensing and Supervision of Insurance Business Proclamation | Law governing the licensing and supervision of insurance businesses |
| Council of Ministers Regulation (No. 200/1994) on Establishment of the Development Bank of Ethiopia | Law governing establishment of Development Bank of Ethiopia |
| Proclamation No.329/2003, Trade Practice Proclamation | Law governing unfair trade practices |
| **Labor and industry laws** | |
| Proclamation No. 42/1993, Labor Proclamation | Umbrella law governing worker-employer relations, work permits, etc |
| Proclamation No. 52/1993, Mining | Laws governing mining |
| Proclamation No. 23/1996 Mining Tax | Law governing 35 percent income tax on taxable income |
| Proclamation No. 152/1999, International Labor Organization Convention Ratification Proclamation | Law on ratification of ILO conventions |
| Proclamation No.146/1998 Privatization of Public Enterprises Proclamation | Law governing the processes and modalities of privatization |
| Proclamation No. 17/1996, Establishment of the Board of Trustees for Privatized Public Enterprise | Law governing the establishment of the Board and the scope of its duties and responsibilities |
| Proclamation No. 11/1995, Tourism Commission | Law governing the establishment of the Commission and |

[89] Drawing on UNCTAD, *Ethiopian Investment Guide* (Geneva: UNCTAD, 2004), http://www.unctad.org/en/docs/iteiia20042_en.pdf, as well as interviews with industry participants.

| | |
|---|---|
| Establishment Proclamation of its duties and responsibilities | its scope |
| Proclamation No. 272/2002, Re-Enactment of Urban Lands Lease Holding | Law governing the period of lease as based on the level of urban development, sector, or type of development activity |
| Proclamation No. 86/1997, Electricity Proclamation | Law governing the generation, transmission & supply of electricity for commercial purposes |
| **Environmental laws** | |
| Proclamation No. 299/2002, Environmental Impact Assessment Proclamation | Law governing environmental impact assessment of investment projects |
| Proclamation No. 9/1995, Environmental Protection Authority Establishment Proclamation | Law governing the establishment of the Authority and its powers, duties and responsibilities |
| Proclamation No.120/1998, Establishment of the Institute of Biodiversity Conservation and Research | Law governing the establishment of the Institute and its duties and responsibilities |
| Proclamation. No. 300/2002, Environmental Pollution Control Proclamation | Law governing pollution control measures |
| Proclamation, No. 295/2002 Environmental Protection Organs Establishment | Law elaborating the responsibilities of Environmental Authorities |
| Council of Ministers Regulation (115/2005) on Ethiopian Water Resources Management Regulations | Regulations governing water use. |
| | |
| **International treaties and membership** | |
| Signatory, Convention on the Settlement of Investment Disputes Between States and Nationals of Other States dated 18 March 1965 and entered into force on 14 October 1966. | |
| Signatory, Convention establishing the Multilateral Investment Guarantee Agency of 11 October 1985. Entered into force on 12 April 1988. | |
| Observatory status at the World Trade Organization (WTO). | |
| Member, Market for Eastern and Southern Africa (COMESA). | |
| Signatory, Fourth ACP-EEC Convention, signed at Lomé on 15 December 1989, Official Journal L 229, 17/08/1991 p. 0003 – 0280 | |
| Partnership Agreement Between the Members of the African, Caribbean and Pacific Group of States of the one Part, and the European Community and its member states, of the Other Part, Signed in Cotonou, Benin on 23 June 2000. | |
| Bilateral investment treaties with Italy (1994), Kuwait (1996), China (1998), Malaysia (1998), Switzerland (1998), Yemen (1999), Sudan (2000), Turkey (2000), Denmark (2001), Algeria (2002) and Netherlands (2003). | |
| Double taxation treaties with United Kingdom (1977) and Algeria (2002). | |
| | |
| **Regional State of Tigray laws and regulations** | |
| Investment Proclamation 12/1987 | |
| Rural Land Law 23/1989 | |
| Registration for business license 7/1991 | |
| Rural Land Investment Law 15/1994 | |
| Land Use Law 136/2000 | |
| Forestry Law 144/2000 | |

Ethiopia is a member of the World Bank Multilateral Investment Guarantee Agency (MIGA), which issues guarantees against non-commercial risks to enterprises which invest in signatory countries. Ethiopia has expressed a strong commitment to concluding bilateral investment promotion and protection treaties with any country and has already signed numerous such agreements. Ethiopia has also signed the World Bank's International Convention on Settlement of Investment Disputes between States and Nationals of other States (ICSID).

## Appendix 4: List of interviews

Abergelle Slaughterhouse General Manager, (June 4, 2008).
Abyssinia Flat Products PLC, General Manager, (June 3, 2008).
Adwa Shoe Company Owner and Manager, (June 4, 2008).
Aider Tomato General Manager, (May 30, 2008).
Alaje Forest Development General Manager, (March 26, 2008).
Brothers Engineering Owner, (May 23, 2008).
Bruh-Tesfa Marketing Director, (March 14, 2008).
Dairy and Feed Processing Association Manager, (May 26, 2008).
Dejenna Business Development Office Head, (May 5, 2008).
Desta Alcohol Factory General Manager, (May 23, 2008).
Dimma Honey General Manager, (March 20, 2008).
EEPCO Tigray Regional Director, (April 24, 2008).
EFFORT Business Development Department Head, (May 4, 2008).
Ethiopia Bureau of Capacity Building Director, (May 22, 2008).
Ezana Mining General Manager, (February 29, 2008).
General Manager of National Geotextile Factory, (April 7, 2008).
GTZ Engineering Officer, (March 28, 2008).
Horn Travel Agency Owner and Operator, (June 3, 2008).
Land O'Lakes Chief Operating Officer, (June 1, 2008).
Maa Garment General Manager, (February 28, 2008).
Maichew Particle Board General Manager, (March 28, 2008).
Mekelle City Urban Planning Department Head, (April 19, 2008).
Mekelle City Sanitation Department Head, (March 14, 2008).
Mekelle City Water Supply and Sewerage Director, (April 20, 2008).
Mekelle Dairy General Manager, (May 24, 2008).
Mekelle Gemstone owner, (May 25, 2008).
Mekelle Water Supply Director, (April 20, 2008).
Messebo Cement General Manager, (April 3, 2008).
Milano Hotel Manager, (May 22, 2008).
Millennium Villages Project (MVP) Business Development Coordinator, (May 28,2008).
PGE Aluminum, Paulos, and Selam Steel Owner, (June 1, 2008).
Road and Construction Department Head, (March 14, 2008).
Sheba Tannery Chief Financial Officer, (February 21, 2008).
TAMPA Director, (April 3, 2008).
TAMPA Agriculture Specialist, (April 14, 2008).
Tigray Bureau of Rural Development and Agriculture, Natural Resources Department Head, (May 30, 2008).
Tigray Bureau of Trade and Industry Director, (May 28, 2008).
Tigray Bureau of Rural Development and Agriculture, (May 30, 2008).
Tigray Investment Office Department Head, (April 24, 2008 and March 16, 2008).
Yegaw PLC General Manager, (May 24, 2008).

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