# ETHIOPIAN INVESTMENT AGENCY

**Investment Opportunity Profile** 

For

 $\label{eq:cotton-production} \begin{tabular}{ll} \textbf{Cotton Production and Ginning in Ethiopia} \\ & (\textbf{Updated}) \end{tabular}$ 

## **Cotton Production and Ginning**

#### 1. Background

Ethiopia is believed to be one of the origins of cotton, and cotton cultivation is deeprooted in the history of the country's agriculture. Cotton is one of the major cash crops in Ethiopia and is extensively grown in the lowlands under large-scale irrigation schemes. It is also grown on small-scale farms under rain-fed agriculture.

Ethiopia annually produces approximately 120,000 tons of cotton (Central statistics Agency). Much of the cotton production in Ethiopia is from small-scale farmers, who cultivate about 39,600 hectares annually. The total area under cotton plantation by the private owned enterprises is 54,000 hectares.

The country produces cotton both for the local and export markets. According to the Report on large and Medium Scale Manufacturing and Electricity Survey (2002) of the Central Statistical Authority (CSA). In 2007/08, the country's textile industries used 52,936 tons of locally produced cotton as raw material. In the same year, export of cotton from the Country was 14,360 tons valued at US\$ 19 million.

#### 2. Resource base

#### 2.1 Altitude

Cotton is basically a crop of warmer climates. In Ethiopia, a good cotton yield is obtainable from areas varying in altitude from sea level to about 1000m. A large area of the Country particularly the country's potential cotton growing areas such as Omo-Ghibe. Wabi Shebele, Awash, Baro-Akobo, Blue Nile, and Tekezze river basins lie within this altitude range.

#### 2.2 <u>Temperature</u>

The optimum temperature for cottonseed germination ranges between  $19^{0}_{c}$  and 300c for early vegetative growth bud formation and flowering, daytime temperature should be higher than  $20^{0}_{c}$ . Temperature between  $27^{0}_{c}$  and  $32^{0}_{c}$  are optimum for boll development and maturity. The potential cotton growing areas mentioned above satisfy these temperature requirements for cotton cultivation.

# 2.3 <u>Soil</u>

Typical cotton soils are heavy, dark, often cracking soils. Cotton crop also performs well on a variety of lighter sols such as loams. Since cotton is a fairly deep-rooted crop, deep soils of 180cm or more are preferred. The Country's potential cotton growing areas have sols of these types.

# 2.4 Water and Land

With regard to water resources, Ethiopia is considered as the "water tower" of North-East Africa. A review of master plan studies and related river basin surveys show that the aggregate annual runoff from the nine river basins amounts to 122 billion cubic meters. The three largest river basins (Abby, Baro-Akobo and Omo-Ghibe) contribute 77% of the total runoff from catchments areas comprising 32% of the total area of the Country. As shown in the following table, the annual runoff from the six river basins which are suitable for cotton cultivation is 122 billion m³ and the potential area of irrigable land is 3.7 million hectares.

Table 1. Water and Irrigable Land Resources of the River basins

No.	River basin	Catchment area (Km²)	Annual runoff (BM³)	Gross potential irrigable area ('000ha)	Developed (irrigated) area ('000 ha)
1	Abbay	199812	52.6	815.58	13.98
2	Awash	112700	4.6	134.12	122.36
3	Baro-Akobo	74100	23.6	1019.52	1.32
4	Genale-Dawa	171050	5.8	1074.72	2.29
5	Mereb	5700	0.26	7.38	0.24
6	Omo-Gibe	78200	17.9	67.93	10.75
7	Rift valley	52740	5.6	139.30	21.90

No.	River basin	Catchment area (Km²)	Annual runoff (BM³)	Gross potential irrigable area ('000ha)	Developed (irrigated) area ('000 ha)
8	Tekeze	89000	7.63	83.37	7.27
9	Wabe shebele	200214	3.15	237.91	19.10
10	Danakil	74000	0.86	158.78	26.30
11	Ogađen	77100	0	0.00	0.00
12	Ayisha	2200	0	0.00	0.00
	Total	1136816	122	3738.60	255.49

**Source**: Ministry of Water and Energy, 2010

# 3. Potential Areas

Cotton has grown in many of regions in the country. In each region there are wide potential areas according to the table two below in Tigray 269130ha, in Amhara 678,710 ha, in SNNPR 600,900 ha, in Oromia 407420 ha, Gambella 316,450, Benshangul 303,170ha, Afar 200,000 ha and Somali 225,000ha. Most of the areas are low land and at river basins. The minimum lease price is 111 birr/ha/ year.

**Table 2**. Cotton Potential Areas

S.NO.	Product	Potential farm area	Distance from A.A	Hectare	Lease price (Br/ha/yr)
1	Cotton	<ul> <li>Tigray</li> <li>Amhara</li> <li>SNNP</li> <li>Oromiya</li> <li>Gambella</li> <li>Benshangul</li> <li>Afar</li> <li>Somali</li> </ul>		<ul> <li>269130</li> <li>678710</li> <li>600930</li> <li>407420</li> <li>316450</li> <li>303170</li> <li>200000</li> <li>225000</li> </ul>	Minimum 111 the maximum 3077

Source; Ministry of Agriculture 2011.

#### 4. <u>Production</u>

In 2007, cotton was grown in 90 countries. In 2006/07, the four main producing countries were China, India the USA and Pakistan and accounted for approximately three quarters of world output. If we added Uzbekistan and Brazil, six countries would account for 83% of world cotton production.

The leading cotton-growing countries are Egypt, Tanzania, Chad, Mali, Benin, Burkina Faso etc. Ethiopia's share is total cotton produced in Africa is about 5%. Africa had to face continuous difficulty in exporting cotton since USA exports cotton with high subsidy. Cotton cultivation cost is lower in Africa as compared to other countries. However, in the absence of good domestic demand and their inability to adopt Bt cotton, the yield per hectare is low. With the current global scenario where food has received priority over other crops, land surplus countries like Ethiopia clearly have an advantage in adopting cotton cultivation.

Ethiopia has a long tradition of cotton cultivation. Ethiopia currently cultivates 3% of the total 2.6 million hectares that is suitable for cotton production – i.e. a cotton cultivation land area, which is equivalent to that of Pakistan (a top-10 global producer) Out of 84,000 hectares of land that is under cotton cultivation, only 35,000 hectares is irrigated. The current annual production of seed cotton is approximately 120,000 tons with an overall yield of 1.42 ton/hectare. The total production of lint cotton in Ethiopia is around 42,000 tonnes out of which about 32,000 tonnes is consumed by domestic textile industry. Majority of the cotton cultivation takes place in the Awash Valley, with some cultivation also taking place in Gambela, Humera, and Metema. The cotton farming cycle varies from area to area. Cotton is planted earliest (by mid April) in the case of Middle Awash, while in Lower Awash planting of cotton takes place in late June. Harvesting of cotton shows less time variation .Of the total land under cotton cultivation, 33% is cultivated by small holders, 45% by private farms and 22% are state owned farms

Ethiopia produces primarily long staple cotton, with staple length of around 30 mm. There are four varieties of cotton that are usually cultivated in Ethiopia. These are

□ □ Mid-Awash
□ Bazen
□ □Hiwot
□ □ Semen Omo

In terms of production methods, almost all of the government-owned and private sector plantations adopt standard cultivation practices. Bulk of the cultivation is in rain fed areas, with only a small part of total cultivated area under irrigation. Pesticides and fertilizers are typically applied whenever required. On the other hand, smallholder cotton farms are rainfed and cotton cultivation is typically organic. The cotton is hand-picked and transported to ginneries

Ethiopia has excellent cotton-growing conditions and a significant amount of land potentially suitable for cotton production. However, the current domestic cotton production is much below the potential which poses as a constraint with respect to backward integration of the country's textile and garment industry. Further, given the relatively limited use of pesticides and chemical fertilizers by Ethiopian smallholder farmers, Ethiopia has the potential to become a producer of organic cotton. But absence of any administrative body to monitor and certify organic farm practices and lack of separate line of ginneries and other processing and handling facilities to manufacture organic cotton-based products is constraining its growth

There are 11 ginneries in the country with Ginning Out Turn (GOT) percentages at about 38%. While all state-owned farms have integrated ginning, private commercial farms may or may not have their own ginning operations. Contract ginning is fairly common in Ethiopia. Currently, total domestic capacity in lint cotton production is estimated at 43,500 MT of lint cotton with varying staple length varieties and quality Premiums. Most ginneries, however, are using outdated machinery. Quality standards and processes are greatly lacking in domestic ginning activities and are a direct obstacle to the domestic production of sufficient quantities of quality lint cotton. Also, most ginneries do not have appropriate waste management systems in place.

Ethiopia is fortunate in that it has the potential to provide the basic production factors to the textile sector. Firstly, the sector highly depends on cotton, and sufficient quantities of this raw material are being produced in Ethiopia; however, the quality leaves much to be desired. There are two broad categories of cotton in Ethiopia, i.e. Selam from the Gondar region in the Northwest of the country, and Awash from the Awash region in the East. There are different grades within each category, but in general Awash is of a better quality. Factories usually use a mix of the different types of cotton.

Table 3 Cotton Production of Medium and Large Scale Farms

Tons 2009/2010 2010/11 Land area Land area Crop Crop **Production** Production productivity productivity hectare hectare 34911 77,109.9 2.11 40366. 82470.2 2.04

**Source;** Large and medium scale commercial farms sample survey ( 2009/10-2010/11)

# 5. Labour

With a population over 70 million, Ethiopia has abundant, hard-working, inexpensive and easily trainable labour force. The average wage for unskilled labour generally ranges from Birr 20-30 (US\$ 1.17-1.76) per day. The salaries of fresh university graduates normally range from Birr 1496-1768 (US\$ 88-104) per month.

#### 6. Market

Cotton production is well integrated into the rest of the economy with large number of textile and garment factories relying on domestically produced cotton. There is also a reliable local demand of cottonseeds for edible oil extraction. The local demand for cotton especially by the growing textile industries producing cotton fabrics and apparel is expected to rise in the future.

The main cotton producing economies also account for a large part of cotton. According to ICAC data, China, the United States, India, and Pakistan as a whole have accounted for approximately more than 55% of global cotton consumption over the period 1980 to 2008. Their overall consumption has risen considerably in volume. For example, consumption multiplied by 3 in China and by more than 3 in India, Pakistan has had the largest increase in volume (which multiplied by 6 between 1980 and 2008) in order to respond to export-driven demand for textiles.

Generally there is adequate and growing domestic and world demand for cotton production in the Country.

## **Export**

The major markets for Ethiopian cotton are Africa, Asia and Europe, with Asia alone accounting for 67% of the total exports. The country is endowed with a rich natural resource base and the soil is suitable for organic farming.

Table 4. Cotton Export

#### **Quantity in Tonnes**

2005	2006	2007	2008	2009	2010
3789	8385	14146	10523	10796	8444

**Source**; Revenue and Customs Authority.

# 7. Investment Incentives

To encourage private investment, the Ethiopian Government has developed a package of incentives under Regulations No.84/2003 for investors engaged in new enterprises and expansions, across a range of sectors. These incentives are available both to foreign and domestic investors and the said Regulations doesn't discriminate between a foreign and domestic investor or between foreign investors of different nationalities. The type of incentives that are available both to foreign and domestic investors are the following:

## 7.1 <u>Customs Duty Exemption</u>

- A 100 percent exemption from the payment of import customs duty and other taxes levied on imports is granted to investment capital goods and construction materials necessary for the establishment of a new enterprise or for the expansion or upgrading of an existing enterprise as well as spare parts worth up to 15 percent of the value of the imported capital goods;
- Investment capital goods imported without the payment of import customs duties and other taxes levied on imports may be transferred to investors enjoying similar privileges;
- Exemptions from customs duties or other taxes levied on imports are granted
  for raw materials and packing materials necessary for the production of export
  goods. Taxes and duties paid on raw materials and packaging materials are
  drawn back at the time of exports of finished products. The voucher system
  and bonded manufacturing warehouse facilities are also in place.
- All goods and services destined for export are exempted from any export and other taxes levied on exports.

#### a. <u>Income Tax exemption</u>

- Any income derived from an approved new manufacturing, agroindustrial or agricultural investment is exempted from the payment of
  income tax ranging from 2-8 years depending up on the area of
  investment, the volume of export and the location in which the
  investment is undertaken.
- Income derived from an expansion or upgrading of an existing manufacturing, agro-industrial or agricultural enterprise is exempted from income tax for a period of two years if it exports at least 50% of its products and increases, in value, its production by 25%.

## b. Loss Carry forward

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

## 8. Remittance of Funds

Foreign investors are entitled to make the following remittances out of Ethiopia in convertible foreign currency at the prevailing rate of exchange on the date of remittance:

# 9. Investment Guarantee and Protection

In Ethiopia both the Constitution and the investment Code protect private property. Ethiopia is also a member of MIGA, which issues guarantees against non-commercial risks to enterprises that invest in signatory countries. Besides, the Country has signed bilateral investment promotion and protection treaties with a number of Countries and is also in the process of signing such treaties with a number other countries.

### 10. Cost of land and Utilities\*

#### **10.1 Land**

In Ethiopia, land is public property. It is available for investment on leasehold basis. Leaseholders have the right to use land for up to 80 years depending upon its location. Lease right over land can be transferred, mortgaged or sub-leased together with on build facilities.

The rental value and the lease period of rural land are determined and fixed by land use regulations of each regional state. The average costs of land in industrial zones and rural areas in four regional states and in Dire Dawa are shown below.

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<sup>\* 1</sup> US\$= Birr 17.50

**Table 2: Indicative land lease/Ret Prices** 

Region	Rural lease prices (for the lease period)		
Oromia	\$4.4.02-7.71/ha/year		
Amhara	\$6.34-28.45/ha/year		
Tigray	\$1.71-2.29/ha/year		
Benishangul Gumuz	\$3.42-4/ha/year		
SNNPR	\$2.17-6.68/ha/year		
Somali R/S	\$0.68-2.57ha/year		

#### a. <u>Utilities</u>

The cost of structure of utilities is as follows:

# a) **Electricity**

• Low voltage time-of-day industrial:

Equivalent flat rate...................................US\$0.333per KWh

High voltage time-of-day industrial 15kv:
 Equivalent flat rate.................................US\$0.023 per KWh

High voltage time-of-day industrial 132Kv:
 Equivalent flat rate.................US\$0.021per KWh

# b) Telephone

- Fixed telephone.......US\$0.011 per six seconds
- Mobile telephone
  - Mobile to mobile......US\$0.041 per minute
  - Mobile to fixed......US\$0.041 per minute

## c) Water (in Addis Ababa)

Residential

•	0-7m <sup>3</sup>	US\$0.1	per m <sup>3</sup>
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- 7.20m<sup>3</sup>......US\$0.18 per m<sup>3</sup>
- Above 20 m3.....US\$0.2 per m<sup>3</sup>
- Non domestic customer......USD0.21 per m<sup>3</sup>

#### b. <u>Taxation</u>

The principal tax rates of the Country are as follows:

- Turnover tax

- Customs duties......0-35%
- Export tax ......nil
- Withholding tax......2%

- Capital gains tax
  - ♣ Shares of companies......30%
  - ♣ Building held for business, factory and office......15%
  - ♣ Building held for residence.....nil
- Income tax from employment......0-35%

# c. One- stop Shop Service

Foreign investors obtain pre-and post-approval services from the Ethiopian Investment agency (EIA). In addition to facilitation and promotional services, the EIA offers the following services under the one-stop shop arrangement:

- Issuance of investment permit......in 4 hours

- Issuance of work permit.....in 1 hour
- Registration of export oriented non-equity based foreign collaboration...in 1 hour
- Facilitation of the acquisition of land and utilities

Hence then suitability of the Country's climate ad soils, the availability of abundant and relatively cheap labour, the conducive investment environment created as well as the growing domestic and world demand for cotton consumption favor cotton production and ginning in the country.