Investment Opportunity Profile for Cotton Spinning Mill in Ethiopia

April 2014
Introduction

Objective of this Document

- This investment profile was prepared by the Ethiopian Investment Agency (EIA) through technical assistance from the Ethiopian Agricultural and Transformation Agency (ATA) and Monitor Deloitte, a division of Deloitte Consulting, a global management consulting firm.
- It provides an overview of an investment opportunity for regional and international investors who are looking for strategic or financial investments in Ethiopia.

Opportunity Definition

- The investment opportunity profiled is the establishment of a cotton spinning mill with an annual output capacity of 8,000 MT.
- The high quality cotton yarn produced would be packaged and supplied primarily into Ethiopia’s growing textile industry (80%), with surplus production exported to the global textile and garment manufacturing market (20%).
- An initial investment of USD 44.6m is projected to return an IRR of 19% over 5 years.

Note: This investment case was prepared by the EIA with assistance from Monitor Deloitte – part of Deloitte Consulting, an independent, global management consultancy firm. Funding for the investment case analysis was provided by the Agricultural Transformation Agency (ATA). Findings are based on public and proprietary information, as well as information gathered by Monitor Deloitte through field investigation and qualitative interviews with industry experts and other key stakeholders. Monitor Deloitte does not make any representation or warranty, express or implied, as to the accuracy, completeness, or correctness of the information contained herein, nor does it accept any liability for any loss or damage, however caused, arising from any errors, omissions, or reliance on any information or views contained in this document. Monitor Deloitte is not a financial advisor; therefore, this document does not represent financial advice.
## Abbreviations and Acronyms

Abbreviations and acronyms used in this investment profile are defined below

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AGOA</td>
<td>Africa Growth and Opportunity Act</td>
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<tr>
<td>AU</td>
<td>African Union</td>
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<td>ATA</td>
<td>Agricultural Transformation Agency</td>
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<tr>
<td>AfT</td>
<td>Aid-for-Trade</td>
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<tr>
<td>CAGR</td>
<td>Compound Annual Growth Rate</td>
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<td>DBE</td>
<td>Development Bank of Ethiopia</td>
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<td>EIA</td>
<td>Ethiopian Investment Agency</td>
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<tr>
<td>ERCA</td>
<td>Ethiopian Revenue and Customs Authority</td>
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<td>EIB</td>
<td>European Investment Bank</td>
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<tr>
<td>ECPGA</td>
<td>Ethiopian Cotton Producers, Ginners and Exporters Association</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GoE</td>
<td>Government of Ethiopia</td>
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<tr>
<td>GTP</td>
<td>Growth and Transformation Plan</td>
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<td>IDZ</td>
<td>Industrial Development Zone</td>
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<tr>
<td>ILO</td>
<td>International Labor Organization</td>
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<tr>
<td>IRR</td>
<td>Internal Rate of Return</td>
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<tr>
<td>kWh</td>
<td>Kilowatt Hours</td>
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<tr>
<td>MMT</td>
<td>Million Metric Tons</td>
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<tr>
<td>NPV</td>
<td>Net Present Value</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<tr>
<td>PPE</td>
<td>Property, Plant and Equipment</td>
</tr>
<tr>
<td>SHF</td>
<td>Small-Hold Farmer</td>
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<tr>
<td>TIDI</td>
<td>Textile Industry Development Institute</td>
</tr>
<tr>
<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>USD</td>
<td>United States Dollars</td>
</tr>
<tr>
<td>USDc</td>
<td>United States Cents</td>
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</tbody>
</table>
• Why Invest in Ethiopia?

• Cotton Spinning Investment Opportunity

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Why Invest in Ethiopia?
Overview of Ethiopia

Ethiopia is home to a growing consumer market and is geographically positioned to provide good access to African, European, Middle Eastern and Asian markets

Ethiopia: A Land of Opportunity

- Ethiopia’s population of ~93 million, Africa’s second highest, provides for a large domestic market

- It is well positioned for global exports and is situated at the cross-roads of Africa and the Middle East
  - Easy access to Asia through the port of Djibouti and close proximity to Europe also enable Ethiopian exports

- Ethiopia’s Gross Domestic Product (GDP) stands at USD 43.13bn and it is among the fastest growing global economies
  - Average growth of ~9.5% per annum has been achieved over the last five years

- Ethiopia has a land area of 1.14 million square kilometers, 45% of which is arable
  - This is approximately twice the size of the United Kingdom

- Although Amharic is the official language, English is spoken widely in business

Source: Monitor Deloitte and EIA Analysis; Ethiopian Investment Overview – ATA, 2013
**Why Invest in Ethiopia?**

**Growing Economy**

The Ethiopian economy has experienced strong economic growth over the past ten years and is forecasted to become the third fastest growing economy in the world by 2015

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**Ethiopia’s Rapidly Growing Economy**

- Ethiopia is one of the *world’s fastest growing economies* with a GDP compound annual growth rate (CAGR) of approximately 9.5% between 2008 and 2013.
- The Government of Ethiopia (GoE) has played a *key role in driving this economic growth*:
  - Two thirds of Ethiopia’s economic growth between 2011 and 2012 was ascribed to public investment with investment in infrastructure reaching USD 6bn (20% of GDP) in 2010.
  - **Regulatory and institutional reforms**, such as improved business registration requirements and procedures have helped to strengthen investor confidence.
  - The Government of Ethiopia (GoE) has set an ambitious target of achieving **middle-income country status by 2025**.
- This rapid **growth is expected to continue** on the back of infrastructural growth, as well as industrial and service sector expansion.

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**Ethiopia GDP, 2008 – 2013 (USD Bn)**

**World’s Five Fastest Growing Economies**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Angola</td>
<td>11.1</td>
</tr>
<tr>
<td>2</td>
<td>China</td>
<td>10.5</td>
</tr>
<tr>
<td>3</td>
<td>Myanmar</td>
<td>10.3</td>
</tr>
<tr>
<td>4</td>
<td>Nigeria</td>
<td>8.9</td>
</tr>
<tr>
<td>5</td>
<td>Ethiopia</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Why Invest in Ethiopia?
Political Stability

**Ethiopia is a politically stable and secure environment for investors and has taken a strong position on good governance**

### Stable Political Environment

- Since the installation of a **federal democratic government** in 1992, Ethiopia has built a **politically stable, secure and peaceful** working environment.
- Democratic processes are observed and a **peaceful transition of power** occurred upon the death of the late Prime Minister Meles Zenawi in 2012.

### Political and Security Integration

- Ethiopia is a **diplomatic and political hub** and hosts the headquarters of the African Union (AU) as well as United Nations Economic Commission for Africa (UNECA).
- Ethiopia is also a key **proponent of peace on the continent** and is regularly involved in conflict resolution in the region.

### Good Governance

- GoE is **committed to promoting good corporate governance practices** in Ethiopia.
- Ethiopia is also party to multiple international agreements to help further promote good governance in the region.

Source: Monitor Deloitte and EIA Analysis; Ethiopian Investment Overview – ATA, 2013; World Bank
Why Invest in Ethiopia?
Example of Active Firms in Ethiopia

A number of large multi-national firms have invested in, and are enjoying success in Ethiopia

<table>
<thead>
<tr>
<th>Agro-Processing Sector</th>
<th>Manufacturing Sector</th>
<th>Services Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEINEKEN</strong></td>
<td><strong>AYKA ADDIS</strong></td>
<td><strong>Radisson Blu</strong></td>
</tr>
<tr>
<td>• Heineken is the third largest brewer in the world with ~140 breweries in 71 countries</td>
<td>• Turkish textile and garment company, AYKA ADDIS Textile &amp; Investment Group PLC, established operations in 2010 with an estimated USD 67.2m investment, one of the largest foreign direct investment (FDI) investments in Ethiopia to date</td>
<td>• The Rezidor Hotel Group, based in Brussels, introduced the Radisson Blu brand into Ethiopia in 2012</td>
</tr>
<tr>
<td>• The company acquired local breweries, Harar and Bedele for ~USD 36.2m and is planning to build a new brewery in Addis Ababa</td>
<td>• Dangote Industries PLC, a subsidiary of the Nigerian conglomerate, the Dangote Group, was established in 2008</td>
<td>• The hotel is estimated to have cost ~USD 25m to construct</td>
</tr>
<tr>
<td>• France’s largest beverage producer, Castel Group, has established a winery in the Zeway region, Ethiopia</td>
<td>• The company is developing a new 2.5 million metric tons (MMT) per annum cement plant, to meet growing demand from the booming construction industry</td>
<td>• The Italian construction firm Salini is located in Addis Ababa</td>
</tr>
<tr>
<td>• The winery was established at a cost of ~USD 15.5m</td>
<td></td>
<td>• The firm is currently constructing the biggest dam in Africa, the Grand Ethiopian Renaissance Dam</td>
</tr>
<tr>
<td></td>
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<td>– Heavy duty machinery worth over USD 35m has already been imported for this USD 4.3bn project</td>
</tr>
</tbody>
</table>

Notes: Exchange rate used is 19.34ETB:USD
Source: Monitor Deloitte and EIA Analysis; EIA Investment Project Database; Company Websites
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Executive Summary

1 Market Opportunity

- Domestically, the demand for cotton yarn is outstripping supply, having grown by 23% over the last four years in comparison to 21% growth in supply
- Ethiopia has the competitive advantage to produce yarn at low cost and service this market but currently lacks the capacity to do so
- Globally, the demand for Ethiopian cotton yarn has been increasing by 11% per year as a result of increased quality of yarn production in Ethiopia

2 Investment Highlights

- The investment opportunity is in a green-field cotton spinning mill in Ethiopia
- The cotton spinning plant will source its raw materials locally and serve both local and export markets
- New, world class equipment will be used to ensure top quality yarn produced
- The opportunity requires a capital investment of USD 44.6m and is expected to generate an internal rate of return (IRR) of 19% over 5 years
- The project is expected to create 260 job opportunities in Ethiopia

3 Enabling Environment

- Key strategies, policies and incentives implemented by GoE such as tax holidays create a favorable operating environment
- In addition, various enablers are being initiated by public stakeholders and donors along the cotton and textile value chain, these include cheaper bank loans and match-making between Ethiopian cotton yarn and textile producers and buyers from the United State of America (USA) and Europe
Cotton Spinning Opportunity

Market Opportunity

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Market Opportunity
Shortage of Local Supply

Although the growth in local cotton yarn supply has been significant over the past four years, it cannot keep up with the current growth in demand.

- Domestic demand for cotton yarn has been driven by the growth in the textile and garment industry
  - Ethiopia was one of the fastest growing apparel exporters between 2005 – 2011
- The GoE has placed a large emphasis on growing the textiles industry from a USD 21.8m to a USD 1bn industry by 2015 according to the Growth and Transformation Plan (GTP)
- Local demand is expected to continue to grow driven by an increase in quality of yarn produced and disposable incomes
  - GDP per capita has grown on average by 9.9% per annum
- Cotton yarn production has grown at a CAGR of 21% over the last four years
- Whilst this growth has been significant, Ethiopia will struggle to maintain this level of growth or match local demand
  - Ethiopian spinning mills can currently produce a maximum of ~87,100 tons
  - However the average capacity of the plants is only around 60% (~52,260 tons) due to old machinery, poor management and lack of trained labor ability
  - This is likely to cause a supply gap which will tend to increase unless more yarn can be produced

Globally, the demand for Ethiopian cotton yarn has grown significantly and is expected to continue to rise.

- Ethiopian cotton yarn exports grew **11% over the past four years** due to increased production from mills and the improved quality of domestically produced cotton yarn.

- As the quality and production methods for yarn become more efficient in Ethiopia this trend looks set to continue.

- GoE has also put an emphasis on export industries and has incentivized companies to export.
  - **Six years tax holidays** are available for textile companies who export greater than 60% of their yarn or supply the yarn to a garment and apparel manufacture who in turn exports more than 60% of produce.

Source: Monitor Deloitte and EIA Analysis; Growth and Transformation Plan Document; FAO World Apparel Fiber Consumption Survey, June 2013; TIDI Data; Trade Map; World Bank
**Ethiopia is an ideal environment for the processing of cotton due to the availability of cheap labor, low cost of electricity and supply of cotton**

### Availability of Labor

- **Average wages are significantly cheaper** than top global producers of cotton yarn
  - They are also lower than top African yarn producers such as South Africa (USD 390) and Morocco (USD 371)
- **Ethiopia has a large labor force** of ~ 38 million people
- A large proportion of this labor force is semi-skilled and easily trainable

### Cheap Electricity

- Ethiopia has the **cheapest electricity** compared to the top three global producers of cotton yarn
  - They are also cheaper than top African yarn producers such as South Africa (8.13 USDc / kWh) and Morocco (10.1 USDc / kWh)
- The GoE is investing in **large power production projects** to ensure constant supply of electricity
  - A key example is the Grand Ethiopian Renaissance Dam

### Availability of Cotton

- Ethiopia currently **produces sufficient cotton lint**, the major raw material for cotton yarn, for the domestic textile industry
- Cotton lint can also be imported **without duty** for use in the manufacturing process

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Note: 1Ethiopia’s electricity rate adjusted for a diesel allowance to run a generator based on periodic blackouts experienced by manufacturers in Ethiopia

**Market Opportunity**

**Competitive Landscape**

*There is no single dominant player across or within a particular stage of the textiles industry value chain, and cotton spinning in particular is attractive for new market entrants*

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## Textile Value Chain Competitive Landscape

<table>
<thead>
<tr>
<th>Stages</th>
<th>Seed Multiplication</th>
<th>Farming</th>
<th>Ginning</th>
<th>Spinning</th>
<th>Garment Manufacture</th>
</tr>
</thead>
</table>
| Competitor | • There are no established local seed producers | • There are three types of cotton farmers, namely:  
  - State Farms  
  - Commercial Farms  
  - Small-Hold Farmers (SHF) | • Currently there are 18 companies engaged in ginning | • Currently there are 16 companies producing cotton yarn | • Many local and global companies are involved in textiles and clothes manufacturing |
| Distribution | | | | | |
| Observations | • Seed multiplication is not done on a commercial level  
• Mainly for own consumption on farms | • SHFs generally produce a lower grade cotton  
• Most high grade cotton is produced by commercial farms with new technologies | • Market consists of state-owned and private ginneries  
• Contract ginning is common practice in Ethiopia | • No firm produces more than 15% of total cotton yarn  
• Most firms are unable to operate at full capacity due to old machinery and poor management | • There is a significant drive from the GoE to grow textiles and garments into a USD 1bn industry by 2015 through the GTP |

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Source: Monitor Deloitte and EIA Analysis; TIDI Data; Growth and Transformation Plan Document
Domestically, the demand for cotton yarn is outstripping supply, having grown by 23% over the last four years in comparison to 21% growth in supply.

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The cotton spinning plant will source its raw materials locally and serve both local and export markets.

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The opportunity requires a capital investment of USD 44.6m and is expected to generate an IRR of 19% over 5 years.

The project is expected to create 260 job opportunities in Ethiopia.

Key strategies, policies and incentives implemented by GoE such as tax holidays create a favorable operating environment.

In addition, various enablers are being initiated by public stakeholders and donors along the cotton and textile value chain, these include cheaper bank loans and match-making between Ethiopian cotton yarn and textile producers and buyers from the USA and Europe.
Investment Highlights
Operational Highlights

The proposed spinning plant will purchase cotton lint from ginneries and sell the processed yarn both locally through wholesalers and internationally through marketers.

Sourcing
- Cotton lint is the main raw material needed for the production of yarn and will be sourced from local ginneries and traders.
- Other raw materials, such as paper cones, plastic bobbins and caps, cans and plastic bags are readily available locally.

Production
- The plant will use new, state of the art spinning machinery including renowned brand names such as Marzoli, Rieter, Trutzchler and Lakshmi\(^1\).
- In the first year the plant is estimated to produce 6,400 tons, before producing at a full capacity of 8,000 tons in subsequent years\(^1\).
- Full capacity will be based on planned production over 320 days a year\(^1\).

Products
- The production plant will be able to produce three types of cotton yarn:
  - Combed yarn
  - Carded yarn
  - Open-end yarn

Markets
- Cotton yarn produced will be sold primarily to the local market
  - 80% will be distributed domestically to textile mills who typically export their finished goods and therefore require high quality cotton yarn
  - 20% of yarn produced will be exported to supply the higher quality grade yarn the mill produces to more stringent but potentially more profitable export markets

Note: \(^1\)Based on a study and business plan commissioned and conducted by TIDI
Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013
Investment Highlights
Spinning Operation Value Chain

The spinning plant will source quality raw materials locally and process the cotton lint efficiently into high quality cotton yarn to be sold in the market

Value Chain for Spinning Operation

- Cotton lint will be purchased directly from ginneries and in some instances through traders should a particular ginnery have low stock
- The traders will deliver the lint to the spinning mill, where a quality check will be done to ensure only best inputs are processed
- The spinning plant will capitalize on world class machinery to ensure production efficiency
- The plant will employ ~260 people\(^1\) of which the majority will be Ethiopians
- The operation could be situated on a 30 000m\(^2\) plot in Sebeta Industrial Development Zone (IDZ), outside of Addis Ababa\(^1\)
- Locally, yarn will be sold directly to textile and garment mills on contract basis. Any lower grade quality could be sold to local wholesalers
- Globally, the finished yarn will be exported via seasoned marketers

Note: \(^1\)Based on a study and business plan commissioned and conducted by TIDI
Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013
Apart from economic benefits, the investment will have a positive impact on Ethiopia’s social development

**Employment Opportunity**
- The spinning plant will employ approximately 260 people\(^1\)

**Technology and Skills Transfer**
- New technology will increase the quality of cotton yarn produced for export from Ethiopia
- Staff will be trained and will develop new and additional skills for the Ethiopian textiles sector

**Support Local Cotton Farmers**
- All raw materials will be locally sourced
- Cotton farmers will benefit from the increased demand of \(\sim\)26 650 tons of raw cotton\(^2\)

Note: \(^1\)Based on a study and business plan commissioned and conducted by TIDI; \(^2\)Based on average conversion rate observed from raw cotton to cotton lint (37.5%) and subsequently cotton lint to cotton yarn (80%) working backwards from 8000 tons of cotton yarn
Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013
The opportunity will require an initial capital amount of USD 44.6m which could be funded through both equity and debt.

**Property, Plant and Equipment (PPE)**
- Land to be leased on a long-term basis
- Building and civil works
- Machinery, including capitalized costs
- Vehicles
- Office Equipment

**Total Initial Investment:**
USD 44.6m

**USD 42.1m**

**Working Capital**
- Working capital is calculated at 10% of:
  - Raw materials / lint purchases
  - Salaries and wages
  - Spare parts on hand
  - Allowance for utilities

**USD 2.5m**

**Equity Investment Requirement:**
USD 13.42m

- The debt-to-equity ratio is calculated at 70:30
- This would take advantage of the relatively cheap bank rates (8.5%) offered by the Development Bank of Ethiopia (DBE) to promote priority sectors such as textiles
  - The DBE requires a minimum equity contribution of 30% capital from the investor

Note: ¹Based on a study and business plan commissioned and conducted by TIDI; Further detail available in appendix
Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013
No further investment is anticipated after the initial capital outlay, and the project can be expected to generate a NPV of USD 4.2m and IRR of 19%

Investment Highlights
Capital Investment and Forecast Returns

Key Highlights (Year 5)

- Internal Rate of Return (IRR): 19%
- Net Present Value (NPV) (USD m): 4.2
- Payback Period: 4 years
- Number of People Employed: 260

Forecasted Free Cash Flow

Key Highlights

- The initial investment in year 0 includes capital raised for
  - PPE
  - Working capital
- After this initial investment there is no further capital investment assumed throughout the life of the model
- The project breaks even in year 4
- This positive cash position would continue to grow into the future
- This will allow the company to either
  - Pay down some of its debt
  - Reinvest to expand the company’s operations

Note: ¹Based on a study and business plan commissioned and conducted by the TIDI; ²IRR and NPV assume no terminal value after five years; Further detail available in appendix
Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013
Investment Highlights
Long-Term Growth Potential

Once the plant has established itself in the market over the first five years, potential will exist to expand operations or diversify the product offering.

**Expand Operation**
- Expand production capacity to capture a greater market share of cotton yarn production in Ethiopia.
- This would require further capital investment in machinery of ~USD 14.2m.

**Product Diversification**
- Begin spinning of synthetic yarn.
- Synthetic yarn demand in Ethiopia is currently primarily met by imports, which have grown at an average 36% between 2008 and 2012.
- Production should be possible with machinery included in this profile.

**Backward Integration**
- Potential to gin cotton lint from premises to ensure consistent, quality lint for the spinning process.
- Cost consideration: New machinery to gin ~7000 tons per annum will cost ~USD 920,000.

Note: ^1Cost of new machinery to increase capacity by 50%; ^2Based on a study and business plan commissioned and conducted by TIDI Source: Monitor Deloitte and EIA Analysis; Trade Map.
# Investment Highlights
## Key Risks and Mitigation Options (1/2)

A number of mitigating options are available to address key challenges that may arise in the supply chain and regulatory environment.

<table>
<thead>
<tr>
<th>Risk Parameter</th>
<th>High</th>
<th>Med</th>
<th>Low</th>
<th>Mitigation Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply Chain Risks</strong></td>
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<tr>
<td>Quality control issues: The cotton market is relatively unregulated, which can lead to quality control issues</td>
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<td></td>
<td>• The Ethiopian Cotton Producers, Ginners and Exporters Association (ECPGA) provides training to SHF on correct farming methods</td>
</tr>
<tr>
<td>Environmental factors: Droughts or excessive rains are a possibility, and may affect cotton production</td>
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<td></td>
<td></td>
<td>• Import cotton lint through the port of Djibouti to alleviate any shortages</td>
</tr>
<tr>
<td>Low capacity and productivity of farms: Outdated farming methods can lead to decreased yields and production of cotton</td>
<td></td>
<td></td>
<td></td>
<td>• Coordinate with ATA’s Cooperatives Team to select advanced cooperatives partners</td>
</tr>
<tr>
<td>Logistical challenges: Lack of adequate warehouses to stock cotton lint and an under-developed road network affect the supply</td>
<td></td>
<td></td>
<td></td>
<td>• TIDI in the process of developing a strategy for storage warehouses</td>
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<tr>
<td><strong>Regulatory Risks</strong></td>
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<tr>
<td>Bureaucracy / lack of coordination: Operationalization can be delayed due to bottlenecks in processes such as land allocation</td>
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<td></td>
<td></td>
<td>• Enlist the support of EIA with regard to any operationalization bottlenecks</td>
</tr>
<tr>
<td>Import of raw materials: It could be difficult to move imported raw material through customs should quality or quantity not be available locally</td>
<td></td>
<td></td>
<td></td>
<td>• Locate the plant in an IDZ as the process for land allocation in one involves less red tape</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Obtain supporting letter from EIA to facilitate imports through the Ethiopian Revenue and Customs Authority (ERCA)</td>
</tr>
</tbody>
</table>

Note: The level of risk relates to the presumed likelihood of the risk materializing.
Source: Monitor Deloitte and EIA Analysis; Interviews with TIDI
Mitigating options are also available to address the key challenges with regards to potential market and financial risks

<table>
<thead>
<tr>
<th>Risk Parameter</th>
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<th>Med</th>
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<tbody>
<tr>
<td><strong>Market Risks</strong></td>
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<tr>
<td>Labor capability: Lack of skilled labor to produce quality yarn</td>
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<td>[ ]</td>
<td></td>
<td>● Engage TIDI to train local employees on best methods to produce quality yarn</td>
</tr>
<tr>
<td>Price volatility of export markets: Exchange rate risks and pricing risk may make selling price of yarn unprofitable</td>
<td></td>
<td>[ ]</td>
<td></td>
<td>● Partner with international traders who have existing global relationships</td>
</tr>
<tr>
<td><strong>Financial Risks</strong></td>
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<td></td>
</tr>
</tbody>
</table>
| High inflation: Loss of competitiveness due to rising input costs |   | [ ] |   | ● Engage in forward contracts with cotton cooperatives, offering market price premium  
 ● Purchase / store stock in advance to hedge risk |

Note: The level of risk relates to the presumed likelihood of the risk materializing  
Source: Monitor Deloitte and EIA Analysis; Interviews with TIDI
The investment opportunity is in a green-field cotton spinning mill in Ethiopia. The cotton spinning plant will source its raw materials locally and serve both local and export markets. New, world class equipment will be used to ensure top quality yarn produced. The opportunity requires a capital investment of USD 44.6m and is expected to generate an IRR of 19% over 5 years. The project is expected to create 260 job opportunities in Ethiopia.

Key strategies, policies and incentives implemented by GoE such as tax holidays create a favorable operating environment. In addition, various enablers are being initiated by public stakeholders and donors along the cotton and textile value chain, these include cheaper bank loans and match-making between Ethiopian cotton yarn and textile producers and buyers from the USA and Europe.
Enabling Environment

Government Initiatives

GoE provides a favorable climate for investment in the textiles industry through strategies, policy reforms and investor incentives

Government Plans

- GoE has prioritized the textile industry given its potential to reduce unemployment and grow the export base
- GoE has outlined bold plans for the industry in the GTP, including:
  - Grow the industry into a USD 1bn industry by 2015
  - Increase export earnings
  - Increase investment in sub-sectors such as skills development and training centers

Policy Reforms

- GoE has placed emphasis on attracting foreign direct investment (FDI) as a critical component for economic development
- It has implemented policy to ease the process of starting and operating a business in Ethiopia
  - The Investment Proclamation Act has broadened the scope of activities of the EIA
  - EIA is now mandated to act as a one-stop shop for registering foreign investments and supporting investors become operational
- Capital requirement exemptions are available for companies operating in key industries, including textiles

Incentives

- GoE offers a competitive incentive package from the point of setting up a business to repatriating profits, including
  - Customs duty exemptions on import of capital goods and machinery
  - Tax holidays of up to six years for businesses exporting more than 60% of their produce or supplying a similar amount to exporters,
  - Remittance of profits and dividends without any restrictions
- The GoE has also placed guarantees against expatriation and nationalization

Source: Monitor Deloitte and EIA Analysis; Interviews with TIDI; Growth and Transformation Plan Document
Enabling Environment

Key Enablers

Key initiatives by public stakeholders and donors in the cotton and textile industry further create an enabling environment that supports this cotton spinning opportunity

Public / Donor Initiatives to Support the Textile Industry

- ECPGA has setup **training programs** to teach SHFs modern, efficient and environmentally friendly cultivation methods to improve both the quality and yield of their crops
  - The initiative has been given **access to loans** for the purchase of different inputs for the harvesting season
- The **Aid-for-Trade (AfT)** initiative aims to support the textile value chain to increase the quantity of cotton and lint being processed leading to a greater supply of raw materials
- The **DBE** provides subsidized loans, with interest rates of as low as 8.5%, to new and expanding businesses through support from the **European Investment Bank (EIB)**
- **GoE** has embarked on **various infrastructure projects** to improve the supply of electricity
- **TIDI** provides match-making between Ethiopian cotton yarn and textile producers and buyers from the USA and Europe
- Eligible Ethiopian cotton and textile goods are allowed **duty-free and quota-free importation into the USA** through the Africa Growth and Opportunity Act (AGOA)

Cotton Spinning Opportunity

Content

- Why Invest in Ethiopia?
- Cotton Spinning Opportunity
- Contact Information
- Appendix
For more information about this investment opportunity or other investment opportunities available in Ethiopia, please contact the following individuals from the EIA

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  *Investment Promotion Expert*  
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  - Phone: +251 115 547 771  
  - Mobile: +251 913 248 647
• Why Invest in Ethiopia?

• Cotton Spinning Opportunity

• Contact Information

• Appendix
## Capital Investment Breakdown

A breakdown of the cost of the investment is provided below.

### Capital Expenditure

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capital Expenditure</td>
<td>USD 42.1m</td>
</tr>
<tr>
<td><strong>Land</strong> <em>(lease rate per annum)</em></td>
<td></td>
</tr>
<tr>
<td>Size of Land</td>
<td>30 000m²</td>
</tr>
<tr>
<td>Lease Rate</td>
<td>USD 0.23/m²</td>
</tr>
<tr>
<td>Escalation Rate</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Plant</strong> <em>(including civil works)</em></td>
<td>USD 6.1m</td>
</tr>
<tr>
<td>Time to complete</td>
<td>1 year</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td>USD 36m</td>
</tr>
<tr>
<td>Machinery</td>
<td>USD 35.4m</td>
</tr>
<tr>
<td>Vehicles</td>
<td>USD 0.31m</td>
</tr>
<tr>
<td>Office Equipment</td>
<td>USD 0.26m</td>
</tr>
<tr>
<td><strong>Pre-Production Capital</strong></td>
<td></td>
</tr>
<tr>
<td>Working Capital</td>
<td>USD 2.5m</td>
</tr>
</tbody>
</table>

### Working Capital

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Working Capital</td>
<td>USD 2.5 m</td>
</tr>
<tr>
<td><strong>Raw Material – Cotton Lint</strong></td>
<td>USD 2.2m</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>&lt; USD 0.1m</td>
</tr>
<tr>
<td><strong>Lease</strong></td>
<td>&lt; USD 0.1m</td>
</tr>
<tr>
<td><strong>Wages and Salaries</strong></td>
<td>&lt; USD 0.1m</td>
</tr>
<tr>
<td><strong>Spares and Maintenance</strong></td>
<td>USD 0.26m</td>
</tr>
</tbody>
</table>

### Financial Assumptions

<table>
<thead>
<tr>
<th>Description</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of Equity</strong></td>
<td>20%</td>
</tr>
<tr>
<td><strong>Cost of Debt</strong></td>
<td>8.5%</td>
</tr>
<tr>
<td><strong>% of Equity</strong></td>
<td>30%</td>
</tr>
<tr>
<td><strong>% of Debt</strong></td>
<td>70%</td>
</tr>
<tr>
<td><strong>Tax Rate</strong></td>
<td>30%</td>
</tr>
<tr>
<td><strong>WACC</strong></td>
<td>10%</td>
</tr>
<tr>
<td><strong>Debt paid down per annum</strong></td>
<td>Zero</td>
</tr>
</tbody>
</table>

Note: ¹Figures based on a study and business plan commissioned and conducted by TIDI
Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013; EIA Factor Cost Book; Development Bank of Ethiopia
### Appendix

## Financial Model Assumptions (1/2)

Assumptions used to develop the financial model are listed below

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>19.34</td>
<td>Current exchange rate used to convert financial model into USD</td>
</tr>
<tr>
<td>Tax Holiday</td>
<td>6 Years</td>
<td>Tax holiday as supply &gt;60% of cotton yarn to export oriented textile companies</td>
</tr>
<tr>
<td>Working Capital Allowance</td>
<td>10%</td>
<td>Percentage of cotton lint fiber, utilities, lease, wages and salary and spares</td>
</tr>
<tr>
<td>Depreciation Rate</td>
<td>5%</td>
<td>Straight line depreciation over 20 years, no residual value</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production Capacity(^1) (tons)</td>
<td>8 000</td>
<td>Production capacity assumes 320 working days with 3 shifts a day. Sundays and public holidays are excluded</td>
</tr>
<tr>
<td>Production(^1) (Year 1)</td>
<td>6 400</td>
<td>Plant operates at 80% capacity in year 1 and 100% from year 2</td>
</tr>
<tr>
<td>% Sold Locally</td>
<td>80%</td>
<td>Majority sold in local market to satisfy growing textile demand</td>
</tr>
<tr>
<td>% Yarn Exported</td>
<td>20%</td>
<td>Exports to satisfy global market’s higher quality requirements</td>
</tr>
<tr>
<td>Expected Increase in Cotton Yarn Price</td>
<td>6%</td>
<td>Prices continue to grow in line with the export price CAGR from 2009 - 2012</td>
</tr>
</tbody>
</table>

Note: \(^1\)Figures based on a study and business plan commissioned and conducted by TIDI
Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013; EIA Factor Cost Book; Investment Regulation and Proclamation (270/2012); Trade Map
Assumptions used to develop the financial model are listed below

<table>
<thead>
<tr>
<th>Category</th>
<th>Assumption</th>
<th>Justification and Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of Goods Sold</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Increase in Cost of</td>
<td>4%</td>
<td>Based on increase in world price of cotton (2008 – 2012). As per TIDI study, lint is</td>
</tr>
<tr>
<td>Goods</td>
<td></td>
<td>expected to grow at same rate</td>
</tr>
<tr>
<td><strong>Operating Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price Increase in Operating</td>
<td>6.53%</td>
<td>Forecasted inflation rate over next five years¹</td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Monitor Deloitte and EIA Analysis; TIDI - Engineering Service Directorate, 2013; EIA Factor Cost Book; Investment Regulation and Proclamation (270/2012); Trade Map