Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector: Strategy and Policy Recommendations
Acknowledgement

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The study team was led by Equiception and Dalberg, with local support and inputs being provided by First Consult, Enterprise Partners and the Ethiopian Garment Manufacturers Association.
Acronyms

AFDB  African Development Bank
AGOA  African Growth and Opportunities Act
ATA   Agricultural Transformation Agency
BOTI  Bureau of Trade and Industry
CBE   Commercial Bank of Ethiopia
CJC   Competitiveness and Job Creation
CMT   Cut-make-trim
COMESA Common Market for Eastern and Southern Africa
CSR   Corporate Social Responsibility
DBE   Development Bank of Ethiopia
DID   Department for International Development
DLS   Digital Light Syntheses
EAC   East African Community
EBA   Everything But Arms
ECDA  Ethiopian Cotton Development Agency
EDRI  Ethiopian Development Research Institute
EIB   Ethiopia Investment Board
EIC   Ethiopia Investment Commission
ELSE  Ethiopian Shipping and Logistics Services Enterprise
EMAA  Ethiopian Maritime Affairs Authority
EP    Enterprise Partners
EPZ   Export Processing Zone
ERP   Enterprise resource planning
ESL   Ethiopian Shipping and Logistics Enterprise Services
ESLE  Ethiopian Shipping Lines Enterprise
ETGAMA Ethiopian Textile and Garment Manufacturers Association
ETA   Ethical Trade Association
ETIDI Ethiopian Textile Industry Development Institution
EU    European Union
FCL   Foreign Currency Loan
FDI   Foreign Direct Investment
FESMIDA  Federal Small and Medium Manufacturing Industrial Development Agency
FLA   Fair labor Association
FTA   Foreign Trade Agreement
FWF   Fair Wear Foundation
FOB   Freight-on-board
GoE   Government of Ethiopia
GDP   Global Domestic Product
GIZ   German Society for International Cooperation
GTP   Growth and Transformation Plan
GTSF  Global Trade Supplier Finance
GSD   General Sewing Data
GVC   Global Value Chain
GT&AVC  Global Textile and Apparel Value Chain
HIPSTERP  Hawassa Industrial Park Sourcing, Training & Recruitment Program
ICF   Investment Climate Facility for Africa
ICT   Information and Communication Technologies
ICS   Improved Cotton Seeds
IDE   Institutes of Developing Economies
IDH   Sustainable Trade Initiative
IFC   International Finance Corporation
IDE   Industrial Inputs Development Enterprise
IlOT  Industrial Internet of things
ILO   International Labour Organization
IP    Industrial Park
ISO   International Standards Organization
IPDC  Industrial Park Development Corporation
ITC   International Trade Centre
LC    Letter of Credit
MEDIA Mauritius Development and Investment Authority
MOLSA Ministry of Labour and Social Affairs
MoST  Ministry of Science and Technology
MoTI  Ministry of Trade and Industry
MoR   Ministry of Revenue
MSMEs Micro, Small and Medium Enterprises
NCDS  National Cotton Development Strategy
NBE   National Bank of Ethiopia
ODM   Original Design Manufacturer
OEM   Original Equipment Manufacturer
OTIF  On time and in full
PASDEP Poverty Sustained Development to end Poverty
PCA   Post Clearance Audit
PPP   Public Private Partnership
RECP  Resource Efficiency and Cleaner Production
ROI   Returns on Investment
SADC  Southern Africa
SEZ   Special Economic Zone
SIDA  Swedish International Development Cooperation Agency
SME  Small and Medium Enterprises
S&E  Social and Environmental
T&A  Textile and Apparel
TCF   Textiles, Clothing and Footwear
TVET  Technical Vocational Education and Training
UNCTAD United Nations Conference on Trade and Development
UNFCCC United Nations Framework Convention on Climate Change
UNDP  United Nations Development Programme
USAID United States Agency for International Development
WRAP  Worldwide Responsible Accredited Production
WTO   World Trade Organization
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector

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GoE has prioritized the textiles and apparel sector and aims to achieve $30 billion in T&A exports by 2025

Local Context

Overview
Development of the textile industry is a national priority for the GoE, as reflected in both the first and second Growth and Transformation Plans (GTP I, 2010-2015; GTP II, 2015-2020). GTP I set an ambitious export earning target of USD 1 billion by 2014/15. GTP II continues to emphasize the development of the sector, and aims to improve production capacity, productivity, quality and competitiveness, and creation of sustainable and reliable input supply. Furthermore, the GoE has made significant investments in Industrial Parks development (7 operational industrial parks, each covering between 1 – 10 million m²). Through targeted relationship building and by providing generous incentives, the GoE has also made concerted efforts to attract global brands and manufactures into its nascent textiles and apparel industry.

GoE Targets
GoE aims to achieve $30 billion in textile and apparel exports by 2025, with a vision to lead the African textile and garment sector in global competitiveness by realizing a sustainable, diversified, and conducive business environment. To achieve this vision, GoE has set specific goals:

1. Technology Upgrading
   - Achieve 85% machine utilization
   - Tool 25% of the sector with state art technology
   - Achieve 30% Uster statics yarn quality
   - Achieve 89% yarn realization

2. Workforce Development
   - Achieve 85% machine utilization
   - Tool 25% of the sector with state art technology
   - Achieve 30% Uster statics yarn quality
   - Achieve 89% yarn realization

3. Backward Linkage
   - Achieve 85% machine utilization
   - Tool 25% of the sector with state art technology
   - Achieve 30% Uster statics yarn quality
   - Achieve 89% yarn realization

Source: ETIDI, Textile and Garment Technology Roadmap
The aim of the study was to assess the sector, identify and synthesize key challenges in the sector and develop policy recommendations to address the constraints

Context of the study
While existing sector development initiatives have resulted in an emerging, dynamic, and export oriented textiles and apparel industry in Ethiopia, the sector continues to face key challenges and as a result has not yet met expectations. The Ethiopian Investment Commission and the Ministry of Trade and Industry commissioned this study to build on the existing sector-specific studies, and develop policy recommendations to unleash growth.

Objectives of the study
The primary objective of this study was to assess, synthetize and identify key bottlenecks faced by the Ethiopian Textile and Apparel Value Chain*, and to develop and socialize policy recommendations to catalyze the sector (i.e., “what’s needed”). More specifically, there are six objectives for this study:

1. Provide overview of the global textile and apparel value chain eco system
2. Assessment of the Ethiopian Textile and Apparel value-chain and identification of key bottlenecks
3. Develop detailed policy recommendations to address key bottlenecks in the sector, modeled after the template used for pharmaceutical sector policy recommendations
4. Employ a highly consultative approach conducting field missions with key stakeholders on both the demand, supply and enabling-environment side to test hypothesized policy recommendations
5. Construct goals and targets for improved competitiveness, comparing Ethiopia’s current performance to benchmark countries, and setting future goals
6. Develop an implementation plan, or plans, for the policy recommendations identified over a five year period, highlighting key necessary steps

Note: [*] Includes the ‘Study for New Creation Capacity in the Apparel sector in Ethiopia’ developed in 2017 as a joint effort with EP, EIC, ETGAMA, MoTI, UKAID, First Consult, Equiception, and ETIDI
To synthesize underlying challenges and to develop recommendations, over 70 stakeholders were consulted and targeted literature reviews were conducted

### Key consultations conducted\(^1\)

Some consulted stakeholders include:
- Buyers,
- International firms,
- Domestic firms,
- Supporting industries,
- Government and Development Partners

### Industry stakeholders were selected based on:

- Size of the firm
- Past export history
- Location of factory (i.e. IP vs. non-IP)
- Place in the value chain (i.e., Garment, input producer, fabric mill etc.)

Prioritized firms that were larger, and had a strong export track record. We also looked to get a mix of locations and producer types (eg. Input, fabric, ginneries)

### Sample Literature Consulted\(^1\)

#### Sector-specific Reports

#### Select list of broader literature
- World Bank, “Mainstreaming Eco-Industrial Parks” (2016)

### Sample Literature Consulted\(^1\)

- ERCA, 2019
- EIC, Cotton, Textile and Apparel Sector Investment Profile: Ethiopia, 2016
- IFC, Ethiopia’s Competitiveness In Garment Manufacturing And Opportunities for Improvement, 2017
- World Bank Group, SME Finance in Ethiopia: WTO, World Textile and Apparel Trade 2017

### Links & websites

- International Apparel Federation
- Fashion United
- International Cotton Advisory Committee, “cotton this month” (October 1, 2017), http://cdf-oplab.unil.ch/
- Carbon breakdown - Sustain (2010), a step in the right direction, Eco Textiles News, October 2009
- Global Assessment of Eco-industrial Parks In Developing And Emerging Countries. 2016
- Textile outlook International February 2017

\(^1\) Full list of reports consulted is included in the Annex 10
Various bottlenecks were identified across the T&A VC and categorized into 6 binding issue constraints and three thematic area constraints (1/2)

<table>
<thead>
<tr>
<th>Issue Area</th>
<th>Main Challenges</th>
</tr>
</thead>
</table>
| 1. Banking Access to FX | - Inefficient customs processing (17 days import time for Ethiopia; 5 days for Sri Lanka) leads to long lead times  
- A lack of standards, which results in high variability in the timelines for clearing imported goods; 10% of all goods shipped in one case study were delayed directly as a result of inefficient customs handling  
- High inland transportation costs (importing to Ethiopia is more than 5 times the cost of importing to Bangladesh; inland transportation costs for imports are about USD 5,470 for Ethiopia compared to USD 1,380 for Bangladesh) |
| 2. Workforce Dev't  | - Shortage of foreign currency – low forex liquidity delays importation and expansion plans. For exporters, this shortage is driven by inability to retain export earnings (manufacturers can only retain 30% of earned forex, the remaining 70% is converted to local currency after 28 days)  
- Low liquidity in the banking sector adds to challenges of high perceived risk in T&A, causing high interest rates (9% - 11.5% from state banks and up to 18% from private banks), and long approval times for loans (up to 6 months) |
| 3. Customs and Logistics | - Difficulty sourcing workers due to largely agrarian background, coupled by low efficiency and productivity; efficiency levels are as low as 25%, compared to Bangladesh (46-47%)  
- High turnover, driven by low wages, and lack of worker facilities in IPs e.g. housing and transport. Some firms report turnover rates of 10%, others as high as 70% |
| 4. IP Development   | - A lack of coordination across agencies in the development of plans for parks and local economic development, causing poor integration with localities |
| 5. Local Capability Support | - Little tailored support & incentives to meet needs of firms that surpass the ‘typical’ domestic firm  
- A lack of guidelines to promote or measure degree of effective knowledge transfer  
- A lack of incentives or controls in place to regulate the sub-contract market  
- Low quality and high cost of local products are the underlying reasons for importation of inputs across the supply chain. E.g. poor quality of cotton causes losses of EUR 144,000 per 100 tons of cotton  
- Limited technological capacity, high cost of equip., and low financial capability to expand for textiles firms and ginneries |

Source: Stakeholder Interviews; ITC, “Textile and Clothing value Chain Roadmap”, 2016
Various bottlenecks were identified across the T&A VC and categorized into 6 binding issue constraints and three thematic area constraints (2/2)

<table>
<thead>
<tr>
<th>Issue Area</th>
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</tr>
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</table>
| Incentives              | • Inability of the current set of incentives to address fundamental operational challenges e.g. access to forex  
                           | • Inability to measure the effects of the current set of incentives because they are not performance based  
                           | • A lack of tailoring to the specific type of stakeholder                         |
| Promotion               | • A lack of activeness and aggressiveness to pursue consistent relationships with international investors, which is slowing down the achievement of growth targets (exports in 2016 were USD 89M, 33% of the USD 271M target)  
                           | • A delay in achieving quality and capability standards that can set Ethiopia apart from competitors   |
| Institutional Arrangements | • No specific mandate to promote the sector's growth amongst most of the government agencies  
                              | • Limited ability to enforce change across institutions due to conflicting priorities  
                              | • Limited use of data for effective decision-making                                     |

Source: Stakeholder Interviews; ITC, “Textile and Clothing value Chain Roadmap”, 2016
To address the identified bottlenecks within the issue area’s specific recommendations were designed

<table>
<thead>
<tr>
<th>Issue Area</th>
<th>Description of Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Banking Access to FX</td>
<td>• Increase supplier credit limit so as to give T&amp;A exporters more room for conducting routine international transactions</td>
</tr>
<tr>
<td></td>
<td>• Allow companies within IPs to trade foreign currencies between themselves in a swap system</td>
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<tr>
<td></td>
<td>• Extend forex transactions to input providers outside IPs</td>
</tr>
<tr>
<td></td>
<td>• Leverage dedicated financing facilities and increased supplier credit to facilitate greater access to (trade) finance for domestic and international firms</td>
</tr>
<tr>
<td>2 Workforce Dev’t</td>
<td>• Strengthen university-industry linkages to meet the specific needs of the T&amp;A sector</td>
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<tr>
<td></td>
<td>• Institute a human resource management body to manage worker recruitment across the industry</td>
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<tr>
<td></td>
<td>• Establish a human resource development fund to support with worker training</td>
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<tr>
<td></td>
<td>• Set up worker service support centers to improve retention</td>
</tr>
<tr>
<td></td>
<td>• Consider setting up minimum wage for the sector</td>
</tr>
<tr>
<td>3 Customs and Logistics</td>
<td>• Develop national sector-specific logistics targets for improved competitiveness</td>
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<tr>
<td></td>
<td>• Allocate dedicated customs officers with knowledge of the T&amp;A sector at each service point with 24/7 availability in IPs</td>
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<td></td>
<td>• Implement clear standards and procedures to facilitate customs clearing</td>
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<tr>
<td></td>
<td>• Incentivize firms to develop container parks</td>
</tr>
<tr>
<td>4 IP Development</td>
<td>• Develop eco-industrial and ‘green’ parks to support investment promotion in building a brand known for compliance</td>
</tr>
<tr>
<td></td>
<td>• Develop a blueprint to guide integrated planning of future industrial parks</td>
</tr>
<tr>
<td>5 Local Capability Support</td>
<td>• Provide extended (financial and technical) support for domestic manufacturers who show potential to be star performers</td>
</tr>
<tr>
<td></td>
<td>• Promote knowledge transfer from expatriates to local employees by instituting guidelines around expat hire</td>
</tr>
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<td></td>
<td>• Develop regulations and approval processes to guide and control sub-contracting practices</td>
</tr>
<tr>
<td></td>
<td>• Initially focus on improving capacity and quality of local auxiliary input industry</td>
</tr>
<tr>
<td></td>
<td>• Promote joint ventures in ginning and textiles to address the equipment, financing, and skills gaps that reduce productivity</td>
</tr>
<tr>
<td></td>
<td>• Strengthen local cotton sector’s incorporation into the export supply chain as a medium to long term strategy</td>
</tr>
</tbody>
</table>

Note: [1] Black Text are recommendations for EIB Considerations; Blue Text are recommendations targeted towards institutional support.
Similarly, thematic area recommendations have been designed

<table>
<thead>
<tr>
<th>Issue Area</th>
<th>Description of Recommendations¹</th>
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</table>
| 1  Incentives               | • Structure a set of performance-based incentives around specific national priorities  
                                • Structure incentives to address operational challenges faced by investors  
                                • Tailor incentives to address the unique challenges of different types of actors across the supply chain |
| 2  Promotion                | • Employ a staged approach prioritizing development of basic products in the short term, and moving to higher fashion apparel in the long term  
                                • Target both US and European buyers who are large enough to attract manufacturers  
                                • Increase use of overseas government representation and third-party affiliations to increase visibility to buyers |
| 3  Institutional Arrangements | • Create a joint taskforce between key supporting institutions  
                                • Optimize collection and use of data at ETIDI, EIC, and MoTI to better support investors |

¹ Black Text are recommendations for EIB Considerations; Blue Text are recommendations targeted towards institutional support.
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector
What is the concept of a Global Value Chain and Global Production network?

Global Value Chains and Global Production Network

- As Trade in intermediate goods (the import content of exports) grew in importance, Scholars adopted the “Global Value Chain” concept and placed more emphasis on the generation and capture of value in the different stages of production.
- The “Global Production Network” concept then extended this approach by adding the full complex of intra-, inter- and extra-firm networks to the analysis; This includes the institutional context and regulatory mechanisms as well.
- The “global value chain” and “global production networks” concepts are used interchangeably and we will follow that convention in this study.

Global Commodity Chains

In the 1990’s, scholars coined “Global Commodity Chains” with 2 components;

- **Producer driven value chain** - typical of industries such as aircraft or automobiles where the producer maintains control over production
  - Capital and technology intensive
  - Require high-wage skilled labor
  - Rely on a close-knit network of suppliers for just-in-time supply of components.
- **Buyer driven value chains** - common in apparel and footwear and
  - Do not involve investment of capital or technology by the buyer
  - Rely on loose networks of outsourced or contracted suppliers to provide finished goods using low-wage
  - Low-skill labor

Element of a Commodity Chain

- Global value chains involve a series of steps or stages from raw materials to retail to consumption and recycling. At each level an ecosystem of actors come together to complete the product and transfer it to the next level.
- The ecosystem involving natural and human capital, goods and service providers, regulators and financial institutions.
- The value chain is characterised by asymmetries of power, weak governance and positive and negative externalities.
- In order to ensure that the value chain serves Ethiopia’s economic, social and environmental objectives a comprehensive and holistic strategy is necessary.

Building the capacity of the Textile and Apparel value chain in Ethiopia has to be approached in a holistic manner.

Apparel value chain has to be understood as a whole, integral, interdependent system that can only function properly when all its component parts are functioning to achieve competitive value chains in Ethiopia focus should be given to;

- Completing, joining and enhancing each link in the chain so as to create a health eco system
- Ensuring backward linkages and cluster development
- Creating opportunities for local SMEs
- Securing technology and skill transfer
- Raising the competitiveness of the Ethiopian export sector as whole through diffusion of learning
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The fashion industry is one of the largest and most value-creating industries in the world; in 2016, the industry was estimated at a staggering $2.4 trillion in total value.

The fashion industry is one of the **largest and most value-creating industries in the world**; above media, transportation, and even commercial and professional service.

**In 2016, the industry is projected to reach a staggering $2.4 trillion in total value.** Although not directly comparable, if the fashion industry were a country, its market size would equate the **seventh-largest economy in the world**, before the likes of India and Italy.

And yet, for some observers, fashion is still regarded as simultaneously frivolous and indulgent, and **many of the source of information about the industry are largely fragmented, incomplete or unreliable**, as not reported systematically across market segments, product categories, operating models, or regions.

The value of the global apparel export market stood at USD 443 billion in 2016, with an estimated 25 million people employed worldwide.

In 2015, the world trade organization (WTO) valued the global apparel export market at $445 billion, which was a two-fold increase from the value in 2000.

However, the rate of growth of the world's apparel trade has slowed down in 2015-16, driven by increasing preference for discounts by consumers, and low adaptability of the industry to consumer behavior and preferences.

In 2014, the industry employed about 25 million people globally. This is almost double the figure in 2000.

The industry provides strong potential for high employment, as it can take on large numbers of relatively low skilled persons, particularly providing opportunities for women.

Global trends are favorable to Ethiopia’s ambitions, as apparel companies are increasingly looking to source from East Africa

Recent Trends

- Recent trends point to a repositioning of global garment sourcing.

- Asia is the traditional powerhouse of textiles and garment manufacturing and will likely remain so in the near future. China and Bangladesh alone accounted for USD 267 billion and USD 30.9 billion of global textile and garment exports in 2017.

- By contrast, all of Africa exported just USD 12 billion. However, buyers are looking for new sourcing locations because: (i) countries like China are increasingly focusing on their domestic market, (ii) rising wage rates, labour disruption, travel bans, and political unrest in current sourcing locations and (iii) increasing cost for social and environmental disruptions.

- A 2015-16 survey of private-label apparel retailers found that 37% were “diversifying their country source of supply footprint,” while 28% planned to diversify in the future.

- According to a 2015 survey, chief purchasing officers of global buyers expect to increase the share of their purchases from Sub-Saharan Africa from 0.3% in 2015 to 2.8% by 2020. Moreover, 70% said they expected to start sourcing, and an additional 20% said they expected to increase the value of sourcing from Ethiopia by 2020.

Attractiveness of the East African Market

- African countries enjoy market access to large developed markets. Like least-developed countries (LDCs) in Asia, East African countries enjoy duty-free access to the European Union (EU) through the Everything but Arms agreement. Unlike Asian LDCs, African countries can also sell garments to the United States (US) duty free through the African Growth and Opportunities Act (AGOA).

- East African countries are well positioned geographically. The Middle East and Europe are nearby, and fabric and other inputs may be shipped directly from Asia. As buyers increasingly prize delivery speed, East Africa’s proximity will become increasingly more important.

- Governments in East African countries have made efforts to attract investment in garment production. In Ethiopia and Kenya, modern industrial parks (IPs) have been developed with garment industry needs in mind. IP tenants enjoy lengthy tax holidays and are often provided special access to international inputs.

Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector
In 2017, apparel export was ~ USD 478 Bn an increase by 4% from 2016; 66% of the world’s apparel export was accounted by China, EU and Bangladesh with 72% of world imports accounted by EU, USA and Japan...

Top 10 exporters of apparel, 2017 (USD Bn)

- The top three exporters of apparel are China, EU and Bangladesh
- Altogether, they accounted for 66% of world export

Top 10 importer of apparel, 2017 (USD Bn)

- The top three importers of apparel were the EU, United States and Japan (attributed to their consumers’ purchasing power and size of the population)
- Altogether, they accounted for 72% of world imports, but down from 78% in 2000

Source: WTO Reports World Textile and Apparel Trade in 2017
Additionally, Textile exports was USD 302 Bn, an increase by 4% from 2016; 65% of the world’s textile exports was accounted by (China, EU and India) with 45% of world’s textile imports is accounted by (EU, China and USA).

Source: WTO Reports World Textile and Apparel Trade in 2017

- Top 10 exporters of textile, 2017 (USD Bn)
  - The top three exporters of textile were China, the European Union and India
  - Altogether, they accounted for 65% of world exports

- Top 10 importer of textile, 2017 (USD Bn)
  - The top three importers of Textile were EU, USA and China
  - Altogether they accounted for only 45 percent of world imports, down from 52.8% in 2000
Overview of the global apparel export and import trends indicates that the market for Apparel is concentrated in EU and USA (as primarily consumers) and Asia (as primarily exporters).

Source: International Apparel Federation, Intracen
Note: Next section deep dives into the respective markets.
Implication for Ethiopia- While Asia remains the traditional powerhouse of textiles and garment manufacturing, apparel countries are increasingly looking into East Africa and primarily Ethiopia as an alternative sourcing destination

Apparel companies are wanting to shift sourcing of apparel from Asia because of...

• **China’s increasing focus on domestic markets** - While China currently accounts for nearly 33% of the sector’s total exports, Chinese firms are turning more and more of their apparel production capacity towards China’s domestic market serving its substantial size and growing middle class. This represents a multiBn opportunity for other countries wishing to increase their share of their global market.

• **Macroeconomic developments** - shrinking labor size (e.g., decline in the working age, shift to a higher value industry), rising wage, raw materials cost, big shifts in foreign exchange rates,

• **Increasing cost for social and environmental disruptions** - rising labor disputes, reports of child labor, poor working conditions, travel bans, and political unrests are increasingly pushing buyers to consider new sourcing locations

They are locating their sourcing operation in East Africa owing its comparative advantage attributed to...

• **Preferential trade agreements** - Like least-developed countries (LDCs) in Asia, East African countries enjoy duty-free access to the European Union (EU) through the Everything but Arms agreement. Unlike Asian LDCs, African countries can also sell garments to the United States (US) duty free through the African Growth and Opportunities Act (AGOA). This agreement gives African countries a tariff advantage over Asian rivals.

• **Favourable geographic locations** - East African countries are well positioned geographically. The Middle East and Europe are nearby, and fabric and other inputs may be shipped directly from Asia. As buyers increasingly prize delivery speed, East Africa’s proximity to major markets may grow in importance.

Source: WTO Reports World Textile and Apparel Trade in 2017
Implication for Ethiopia—Africa and Ethiopia are in better position to tap into the USA and EU market.

- Djibouti has the shortest distance to Western/Eastern Europe and relatively shorter distance over Eastern USA.
- China has the shortest distance to Western coast of USA.

Source: WTO Reports World Textile and Apparel Trade in 2017
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The eco-system of the GTAVC consists of several interdependent links which spans over several geographies, includes a multitude of core and support actors, and is for the most part, unregulated and is left to the core actors.
Raw Materials - With emphasis on Global cotton production, consumption, price

Global Context

RAW-MATERIALS- NATURAL FIBRES AND MAN-MADE
- Fibres used in the textile and apparel are either natural (cotton, wool etc) or Man-made (e.g., Polyester). Cotton market share in textile went from 50% in 1990s and declined to 40% in 2006 and 26% in 2016 while the share of non-cellulosic fibres, rose from 40% to 1990 to 68% in 2016, spurred by technological advancement that allowed for enhanced, productivity, quality, lower cost and greater diversity and consumers preference for synthetic or blended materials.

COTTON
- Production of cotton is highly labor intensive - Primarily grown by small holder farmers, Harvesting is significantly manual, but shift is being made to mechanical harvest
- World's production of cotton has been increasing in absolute terms - 21.48 Mn tons in 2015/16, 23.05 Mn Tons in 2016/17 to 25.38 Mn tons in 2017/18
  - During 2017/18, world cotton production is projected to increase by 10%. Higher cotton prices during 2016/17, better cotton price ratios to other competing crops during 2017 planting campaign resulted in expansion of cotton area by an estimated 3 Mn ha to over 32 Mn ha
- 70% of world's cotton is produced by 4 countries
  - Producers- India, China, the United States and Pakistan are the world's largest producers and account for about 70% of global lint output (ICAC, 2017). During 2017/18 the largest gain in production of 23% to 4.6 Mn tons is projected in the USA. Production is also projected to increase in all other major producing countries including India, China, Pakistan, Brazil, Francophone Africa and Turkey
  - Exporters- In 2017/18, world trade of cotton is projected stable at 8 Mn Tons and USA will remain the largest exporter accounting for 40%, or 3.1 Mn tons of world shipments.
- Consumption of cotton has continued to increase in absolute terms – from 24.18 Mn Tons in 2015/2016 to 24.56 Mn Tons in 2016/17, 25.22 Mn Tons in 2017/18
- The largest cotton producing countries are also the largest consuming countries
  - Importers- Asia concentrates about 85% of world's imports. China was by far the top importer from 2002 to 2015, but has been surpassed by Bangladesh and Vietnam in 2016
  - Bangladesh will remain the largest importer in 2017/18 accounting for 18%, or 1.4 Mn tons of world imports
- Brands are increasing becoming strict on the sustainable production of cotton: the industry is making efforts to find ways to produce fibre with less land, less water, less energy, and fewer chemicals;
  - While organic and fair trade cottons remain niche products, Better Cotton Initiative (BCI) and Cotton made in Africa (CmiA), both launched in 2005, are successfully expanding market opportunities for more sustainable cottons BCI production rose to 12% of global production in 2015, up from 7.5% in 2014 and aims to reach 30% of global production in 2020

Did you know?
It takes 3 years for farmers to convert their land to certified organic. That’s how long it would take for the chemicals and pesticides to clear the soil.

Cost Breakdown of Key Inputs

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrochemicals, Improved Seed, Land Clearing and labor</td>
<td>Cotton</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation</td>
<td>6%</td>
</tr>
<tr>
<td>Seeds</td>
<td>8%</td>
</tr>
<tr>
<td>Insecticides</td>
<td>10%</td>
</tr>
<tr>
<td>Ginning</td>
<td>15%</td>
</tr>
<tr>
<td>Weeding</td>
<td>18%</td>
</tr>
<tr>
<td>Harvesting</td>
<td>21%</td>
</tr>
<tr>
<td>Fertilisers</td>
<td>22%</td>
</tr>
</tbody>
</table>
Overview of textile process - (ginning, spinning, weaving and knitting, dyeing, washing and finishing)

**Global Context**

**Textile overview**
- Cotton textile production is the most capital intensive industry in the CTA value chain especially in the spinning, weaving and finishing stages. E.g., an integrated denim plant (from spinning through fabric finishing) costing roughly USD 50 Mn would consume the equivalent of 19,200 Metric Tons of seed cotton annually. Compare this to the capital cost of approximately 1.3 Mn USD required to process the seed cotton consumed in the denim plant.
- Power quality and costs, along with the cost of fibre and demand for fabric are key drivers of investment and production at this stage.
- China dominates the world textile market emerging over the course of the last three decades, followed by EU and India.

**Ginning - process of separating cotton fibre from seeds - two technologies**
- **Roller Ginning**: gripping and stretching fibre through rollers/blades (simpler, slower but gentle), capacity per gin stand (40 to 110 kg lint/hr (SR-DR) 175-225 (rotobars); 360 to 1,000 (HS rotobars).
- **Saw Ginning**: Pulling fibre with saws through ribs (complex, faster but harsher), capacity per gin stand (1,800 to 3,400 kg lint/hr).

**Spinning - process of converting lint to yarn**
- Highly capital intensive operation with low labour requirements.
- Spinning operation can produce 100% cotton yarn as well as blends with polyester or other man-made fibres depending on market requirements.
- Two main technologies for spinning cotton yarns: Ring spinning - a versatile process suitable for a wide range of yarns, from coarse to fine and super-fine yarn. Open-end spinning is generally used to produce coarse yarns (up to Ne 30).

**Weaving, knitting and finishing**
- It is a heavily capital intensive operations. While knitting is moderately capital intensive and is scalable down to a much smaller size than weaving, knitting is rarely done as a stand-alone operation and is integrated with garment production.

---

**Source:** 1. Strengthening the Cotton, Textile and Apparel Value Chain in East Africa: An Assessment Draft August 2014 USAID Trade Hub East Africa.
Apparel production

Production of a Cotton Shirt in Bangladesh

<table>
<thead>
<tr>
<th>Total Fabric Price/pc</th>
<th>Cost of Making</th>
<th>Trim Cost/pc</th>
<th>Wash/pc</th>
<th>FOB/pc</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$ 6.50</td>
<td>US$ 1.50</td>
<td>US$ 0.90</td>
<td>US$ 0.20</td>
<td>US$ 9.10</td>
</tr>
</tbody>
</table>

The Breakdown for a Pair of Men's Chino Pants

<table>
<thead>
<tr>
<th>Total Fabric Price/pc</th>
<th>Cost of Making</th>
<th>Trim Cost/pc</th>
<th>Wash/pc</th>
<th>Packaging</th>
<th>FOB/pc</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$ 4.75</td>
<td>US$ 1.70</td>
<td>US$ 1.05</td>
<td>US$ 0.90</td>
<td>US$ 0.75</td>
<td>US$ 9.15</td>
</tr>
</tbody>
</table>

Global Context

Production

- Initially concentrated in one geography (vertical integration), then innovation in ICT and logistics allowed companies to break the T&GVC into its component parts and disperse it across several geographies.
- Materials, trims, packaging and washing make up the bulk of the costing for any garment; competing on labour cost alone is race to the button.

Actors

- Suppliers in the textile apparel value chain mostly consist of family run SMEs invested in quota-rich countries to benefit from cheap labour, quota's and generous incentives provided by the host countries.

Buyers

- There are three types of lead firms (buyers) based on their sourcing strategies and their corresponding value chains.
- Lead firms or buyers employ many different apparel sourcing strategies.
- Buyers are focusing more on branding and marketing and shifting both manufacturing responsibilities down the chain.
- They are increasingly requiring their suppliers to measure their environmental and social footprint.

Note: [1] Deepdives available on the preceding sections
Deep dive on production - Initially garment production was concentrated in one geography (vertical integration), then innovation in ICT and logistics allowed companies to break the T&GVC into its component parts and disperse it across several geographies.

- Originally, this was due to the limitations of communications and logistics that made it difficult to coordinate extended supply chains.
- Those vertically integrated companies were often very attached to their locations, employing generations of workers from the same families.
- They were integral to the development of the local community and took a long-term view that balanced employees, community and profits.

Since 1970s, companies broke the production process down into its component parts and decided where to locate based on competitive advantages
- Innovations in ICT and logistics allowed companies to disperse production geographically based on competitive advantage and value addition.
- Companies broke the production process down into its component parts and decided where to locate each one, depending on factors such as the availability of raw materials, labor and technology, proximity to markets and fiscal and trade incentives and today over 60% of global trade is in intermediate goods.
- End of the Multi Fiber Agreement (MFA) quota system in 1995 has led to constant reconfiguration of the GTAVC since

Goods and services were produced by vertically integrated companies that owned all the stages in the process from raw material to retail

- New technologies (e.g., 3D Printing) may also make it possible to shift production back to final markets; the critical factor of time will almost certainly shorten the value chain.

Future trends
- End of the Multi Fiber Agreement (MFA) quota system in 1995 has led to constant reconfiguration of the GTAVC since
Deep dive on production- Materials, trims, packaging and washing make up the bulk of the costing for any garment; competing on labor cost alone is a race to the bottom.

An examination of actual costing sheets for current production of a cotton shirt in Bangladesh:

<table>
<thead>
<tr>
<th>Total Fabric Price/pc</th>
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<th>Trim Cost/pc</th>
<th>Wash/pc</th>
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The breakdown for a pair of men’s Chino pants is similar:

<table>
<thead>
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<th>Total Fabric Price/pc</th>
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</tr>
</tbody>
</table>

What does the costing tell us?

- Competition should be focused on materials and fabric rather than labor; Material, trims, packaging and washing make up the bulk of the costing for any garment and that is where big savings can be made; Competing on labor costs is to compete on 15% of the total FOB cost, so the potential savings are small in comparison to those for materials, trims and washing.

- Secondly, the more of the cost components that can be sourced locally, the better. That should reduce transport and administrative costs and save time. It is therefore important to develop accessories, trims, labelling and packaging suppliers in Ethiopia. This will require foreign investment in the short term but there are also opportunities for local SMEs in this regard.

Implications for Ethiopia- Ethiopia has much more to gain by developing its capacity to compete on the raw materials, packing and washing than on labour.
**Deep dive on suppliers** - Suppliers in the textile apparel value chain mostly consist of family run SMEs invested in quota-rich countries to benefit from cheap labour, quota’s and generous incentives provided by the host countries.

**Characteristics of Suppliers**
Suppliers in the textile and apparel value chain mostly involve SME often managed by family members rather than experienced professional managers. This is attributed to:
- Low barriers to entry in the apparel sector
- The quota system that prevailed under the Multi fibre Arrangement until 1994

**Implications for Ethiopia** - when designing incentives and marketing the investment opportunities available in the country, the aim should be to attract companies that have the capacity to manage their operations in a foreign environment and to create decent work opportunities in their own and local supplier facilities.
Deep dive on buyers- There are three types of lead firms (buyers) based on their sourcing strategies and their corresponding value chains

<table>
<thead>
<tr>
<th>Type of Buyers</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Brand Manufacturers| • As the name suggests, are brands that are vertically integrated still engaged in manufacturing activities. Some are integrated all the way back to raw materials, but most are involved in one or more of the stages of yarn and textile production, cutting and sewing apparel, and retailing (through their own and other outlets)  
  • Their numbers have fallen as brands decided to outsource lower value added functions and concentrate on design, marketing, retailing and finance. Even those that still manufacture also make use of suppliers to add capacity and flexibility  
  • More typical of prime and luxury brands that need to protect their intellectual property and quality.                                                                 | • VF                      |
|                    |                                                                                                                                                                                                            | • Hanes Brands            |
|                    |                                                                                                                                                                                                            | • Fruit of the Loom       |
|                    |                                                                                                                                                                                                            | • Hugo Boss               |
| Brand Marketers    | • Specialize in branding and marketing, but not manufacturing  
  • Some are former brand manufacturers that sold-off their production operations (like Levi/s) while others were founded by designers or entrepreneurs that never engaged in production activities (Nike or Patagonia).  
  • They may or may not own their own retail outlets.                                                                                     | • Levi                    |
|                    |                                                                                                                                                                                                            | • Nike                    |
|                    |                                                                                                                                                                                                            | • Patagonia               |
| Retailers          | • Divided into two sub-categories  
  • Some discount and department store retailers such as Walmart, Marks & Spencer and Tesco have their own label production  
  • Those Who only sell their brands e.g., Gap and H&M  
  • Like brand marketers, retailers do not own manufacturing facilities but drive global production networks.                                    | • Walmart                |
|                    |                                                                                                                                                                                                            | • Marks & Spencer         |
|                    |                                                                                                                                                                                                            | • Tesco                   |
|                    |                                                                                                                                                                                                            | • Gap                     |
|                    |                                                                                                                                                                                                            | • H&M                    |
Deep dive on buyers- Lead firms or buyers employ many different apparel sourcing strategies

Lead firms (brands, retailers) sourcing strategy

- Buyers chose from a magnitude number of suppliers; relationship between buyer and supplier is purely transactional and price driven
- Suppliers are competing for every order; no trust or long term relationship built with the buyers

- The supplier has done several transactions with the buyers and has developed trust based relationship
- Lead firm may invest in developing the technical capacities of the supplier to encourage the supplier

- Lead firm provides all the technical specification to the turn-key supplier which coordinate the system to deliver the buyers orders
- Transaction is based on more than price as buyers are reliant on the suppliers ability to manage produce and process standard and network of sub suppliers

- These are vertically integrated companies that own or control all stages of production, from raw materials to final assembly and possibly even retail

Implications for Ethiopia- The country should develop its supplier base from the narrowest to the widest range of functions and services. It means a shift from transactions based on pure price to trading in skills, services and knowledge. This means more decent jobs, higher wages, more value captured in the country.
Deep dive on buyers- buyers are focusing more on branding and marketing and shifting both manufacturing and non manufacturing responsibilities down the chain

 Buyer and retailers are looking to shift as many costs and functions as they can to countries and suppliers further down the value chain

**Buyers**
- Focus on their core competencies- branding and marketing
- They construct the supply chain and impose costs and responsibilities on suppliers. Any supplier that fails to meet buyer requirements will quickly find themselves cut out of the chain

**Suppliers - Handling the “full package” giving the supplier more control over costs, margins and crucially, time i.e.,**
- Manufacturing roles
  - Procurement of material, trims and accessories
  - Logistics and warehousing
  - Some have additionally developed design capacity to cover everything from design to delivery.
- Non-manufacturing - Buyers have additionally tasked suppliers with monitoring
  - Social and environmental compliance
  - Health and safety issues, chemicals management, carbon and water footprints and security concerns

Case Study- USA
- In the early days of outsourcing American brands sent cut pieces to Mexico to be assembled into garments. This was known as “production sharing” and allowed each party to concentrate on their comparative advantage - the US in capital intensive textile manufacturing and Mexico on labour intensive assembly.
- Asia was too far away for the same production sharing arrangement and so US brands contracted Asian suppliers on a “full package” basis whereby the supplier procured all the inputs, cut and sewed the garment and delivered the final product.
- Over the years more and more functions have been added to the “full package”, including trade finance and logistics.

Implications for Ethiopia- Ethiopia must brand its value chain as socially and environmentally sustainable “EPZ… enhance competitiveness through… switching from a narrow focus on cost advantages and lower standards to become champions of sustainable business…” UNTAD, 2015
Buyers are leading the changing global trends, as buyers have the greatest influence over where the industry sources

In addition to lower costs, buyers are increasingly focusing on S&E compliance and shorter lead times, given experiences in other markets and customer preferences. They are looking for markets that can distinguish them based on these criteria.

**International Garment Manufacturers**
- Are driven by demands of buyers (cost, quality, lead times, compliance)
- Buyers draw international garment manufacturers into new markets
- E.g. PVH set up in Hawassa IP and attracted 14 other companies (manufacturers and suppliers)

**Raw Input Providers**
- Inputs (starting with cotton) must meet quality standards of buyers to be used in the export chain
- Locally produced cotton in Ethiopia is of lower quality than imports, and is largely excluded from the export value chain

**Local Garment Producers**
- Often have lower quality due to lower requirements of domestic supply chain
- Those that want to supply for export must meet quality and increasingly, compliance requirements of buyers

**Auxiliary Input Providers**
- Are especially sensitive to buyer presence as they require high buyer concentration in an area for attractive RoI
- Ethiopia has few auxiliary input manufacturers, most buyers import their non-fabric inputs
Deep dive on sustainability - Environmental, social and economic sustainability forms the three pillars to sustainability.

A Social
Ability of a system to function at a defined level of social well being

B Environmental
Ability to maintain rates of renewable resource harvest, pollution creation, and non-renewable resource depletion

C Economic
Ability to support a defined level of economic production indefinitely

Note: Next section deep dives on the three pillars of sustainability.
Deep dive on social sustainability - Main export platforms in emerging markets are characterized by highly unstable labour situation as investors frequently underestimate and fail to quantify the impact of labour and social issues.

- Incoming investors frequently underestimate, and fail to quantify, the impact of the labour and social issues that come with their investment. It is only when they reach full operating strength they try to cope with the symptoms of dysfunction such as late-coming, absenteeism, ill-discipline, errors and waste, strikes and labour turnover.
- However, the coping mechanisms often generate further conflict as the employers seldom conduct a root cause analysis to identify the real drivers of conflict and as such condemned to operate at low levels of efficiency and profitability, constraining company revenues and workers pay.
- Additionally, From Central America in the West to the Philippines in the East, many investment zones were designed and developed to enable tenants to achieve world class export performance but many zone authorities undermine these efforts by failing to provide matching social infrastructure.
- This generally stems from the division of labour in the host government; the initiative to develop investment zones is normally taken by the trade or finance ministry with insufficient consultation with the ministries responsible for the labour market, housing, transport and social services.

Result:
- Even countries that have a statistical oversupply of labour and attractive nominal wage rates may not be able to ensure a competitive supply of labour to zone factories because of dysfunctional labour, housing, transport and other markets.
- Workers struggle to adopt to the rhythm and discipline of factory work; unable to report to work on time and produce world class product at world class rates of efficiency, hour after hour and day after day.
Deep dive on social sustainability - Main export platforms in emerging markets are characterized by highly unstable labour situation as investors frequently underestimate and fail to quantify the impact of labour and social issues

**Heightened awareness on adverse effect of wasteful production/consumption**
- The speed of fashion is amplifying 5 fundamental problems in the industry: high water consumption, discharge of hazardous chemicals, greenhouse-gas emissions and waste production and violation of human rights and labour standards
- Specifically, for consumer products like garments, the old paradigm of “cradle-to-grave” is making way to “cradle-to-cradle” thinking (or the circular economy) - the importance to assess environmental impacts across the life-cycle has become crucial from resource extraction, manufacturing, transportation to consumption, and disposal

**Growing understanding of the business case of sustainability**
- Risk management - With a complicated supply chain like garment, there is an ever-increasing need to manage ESG risks covering the workplace, market-place, community and the natural environment; this is further accentuated in world where the average person can now assume a “watch-dog” function naming and shaming brands. Brand value of buyers can be easily lost if companies in supply-chains are implicated in harm to human/community rights, child rights, labor rights, the environment, or caught in corrupt or anti-competitive practices. The Rana Plaza disaster in Bangladesh is one stark reminder.
- Cost minimisation - increasing need to minimize cost of production to remain competitive in the global market - especially as the costs of raw materials, energy and waste handling are increasing. Resource Efficiency and Cleaner Production (RECP) has been a tried and tested approach to help achieve that objective
- Access to conventional and niche markets: responding to these issues has become an area of potential differentiation and creative inspiration

**Emergence of responsible innovation amongst the largest fashion companies**
- Embracing circularity (cradle-to-cradle design; design for recycling): some of the largest fashion companies such as H&M and Nike have publicly set sustainability goals and are carrying them in practice.
- Example - H&M has programmes to refurbish or recycle old garments and Nike also unveiled its European Logistics campus in Belgium, founded on responding to sustainability challenges and maximising performance while minimising footprint.

**Shifting paradigm on the role and responsibility of business in society**
- Over the last 50 years, traditional argument, “the business of business is business” has been challenged and expanded to include stakeholders - not just shareholders.
- Importance of partnerships and collaborative governance is widely recognised and appreciated - including the global community, the UN, national governments, civil society, academia and the private sector itself.

**Emergence of sustainability standards for the garment sector**
- Driven mainly by buyers; most important standards include ISO 9001 (for companies), ISO 14001, WRAP, OEKO-TEX; Developed countries also have eco-labels such as the Blue Angel in Germany and the White Swan in Scandinavia.
- Globally consumers are a force to be reckoned with when it comes to boycotting bad companies/products but not much in rewarding good ones (“boycotting”); additionally, the proliferation of various standards and eco-labels has become confusing for the consumer. There is a call to harmonise this space.

Note: For more detail, refer to annex 2
Deep dive on Economic sustainability – Additionally, apparel and textile sourcing countries should aim to the extent possible drive to have a localized value chain and self sufficient export

- Foreign invested factories should forge backward and forward linkages in to the host economy to allow for the transfer of knowledge, skill and technologies to the local players across the chain
- Local Small and Medium Enterprises should be incentivized and capacitated to provide ancillary services to the Textile and Apparel sector
- Ownership of companies should gradually shift from Foreign to local based

- Import content of exports should go down and the domestic content of the exports should rise until a country is self sufficient
Fashion Design, Consumers & Retailers- consumers have become more sophisticated, technology- driven, and harder to predict than ever, with designer and retailers striving to keep up

Accelerated pace of fashion industry cycles has increased the pressures bearing down on creativity

- It used to be Fashion designers which told consumers what to want; now designers are taking more input from the buying and merchandising teams to react to what is selling rather than defining what will sell through forward looking design risks.
- Additionally, the reduced time between cycles has led to an increased in alleged plagiarism as the pressure to create new collections is as much a concern for mass market players as it is for luxury brands.
- More collections and shorter design cycles are leading to high turnover among creative directors and putting strains on the creative process.

Ethical innovation offers a way forward

- product design is being transformed by consumers and brands who have prioritised sustainable fashion.

Always connected and informed - grown more comfortable with mobile, online interaction which allowed them to consume apparel when, where, how and at price they like.

Always on, shopping around the clock - millennials are demanding instant gratification.

More demanding - seeking personalization customization, increasingly becoming sophisticated, harder to predict and forcing retailers and brands to their needs, rather than the other way around.

More value conscious - consumers increasingly becoming values oriented. 2016 McKinsey Global Institute Report estimates that more than 65% of consumers in emerging markets actively seek out sustainable products.

Discount or off-price shoppers - In 2016, discount shoppers accounted for 75% of apparel purchases across all channels; Part of the reason why consumers have been able to seek discounts and promotions has been their uptake on e-commerce and digital tools, which has created price transparency across brands and regions.

Life style conscious - new consumer lifestyle are trending driven by casualization, inclusivity (e.g., genderless fashion, plus size fashion, modest wear (for Islamic consumers from Middle East and South East Asia), wellness programs.

Retailers

Rise of Omni channel and fast fashion require players to adapt to higher flexibility, more collections, the ability to deal with small batch sizes, and quick responses.

E-commerce - increase in digitalization have decreased foot traffic in stores; modern retailers are coping by diversifying and offering online shopping but not traditional retail channels.

Shorter lead time - Even fast fashion companies are adjusting their process to accommodate shorter design fashion; they confirm orders at the last possible moment and take delivery as soon as possible to catch the fashion trend before it passes; lead times are under constant pressure and have fallen from 120 days to 30 days in many markets. This places enormous pressure on the manufacturers to increase productivity and efficiency while at the same time cutting costs.

Sustainable production and consumption - Buyers and supplies are increasingly monitoring and publishing their sustainability credentials.

Focus on promotion and discounts - traditional retailers have more outlet stores and discount stores than full-price shops; outlet malls set to double in number in China by 2020, Europe (e.g., in UK, six mark-down periods scheduled across the year) and are also playing out in Germany and other EU countries.

Life style responses - traditionally, wellness and fashion have not been allied industries. However, recent trends have emerged with Athleisure, an athletic-inspired way of dressing designed to be worn for exercising, street wear and day wear.
There are additional support functions that determines the reliability and efficiency of the GTAVC

Custom and Clearance
- Export manufacturers are exposed to custom processes and regulations twice in each order cycle — once when importing production inputs and again when exporting finished product (it is crucial that there are no delays that can cause the consignment to miss delivery deadlines since that can lead to expensive airfreight and contractual penalties imposed by the buyer.
- For this reason factory management need to be able to rely on fast customs clearance times and minimum delay in order to operate efficiently, ensure that the production lines are fully loaded and that orders are completed on time.

Transport
- The T&A VC is driven by ever-shortening lead times and mandatory on-time deliveries. Missing a shipping schedule exposes the manufacturer to large fines from the buyer and risks the entire order being cancelled.
- Additionally, when delivery of raw materials is held up it can stop the production process, putting workers on short time and risking the loss of skilled workers as they migrate to factories that have work. Efficient, economical modes of transportation and logistics are thus critical.

Utilities
- Operations in textiles and garment requires sufficient and reliable access to water and energy.

Connectivity
- The modern textile and apparel value chain needs constant high-grade connectivity between head office, subsidiaries, factories, suppliers, customs, transport providers and markets. Disaggregated production and fast fashion both require efficient and timely information sharing. Virtually all transactions are handled via email or VOIP calls.
- In addition, ICT also aid communication between supplier and buyers allowing for automated monitoring of orders, stocks and prices travelling through the manufacturing and shipping process. Enterprise resource planning integrates orders, sourcing, manufacturing, account handling and logistics, thereby helping companies optimize operations. In addition, modern ICT tools can allow manufacturers to track units throughout the production line in real time, facilitating more effective monitoring.
- As more and more machinery and equipment becomes digital the connectivity of processes will increase using the Internet of Things (IoT) and this calls for urgent investment in communications infrastructure and technology.

Access to Finance
- Given the competitive nature of the textile and apparel industry, it is essential that raw materials, accessories and trims be brought together in factories on a timely basis. The increasing pressure on suppliers to shorten their delivery times and operate on a “just-in-time” basis, makes the planning and timing of material inputs purchase critical to success. Where materials are imported, any delays in accessing Forex and Trade finance impacts the competitiveness and profitability of exporters.
In summary, GTAVC is under threat of disruptions owing to five major factors – the future of GTAVC is shorter, faster, more responsive, more flexible and more sustainable than before.

### Causes of Disruption

1. **Scarce natural resources**
   - Mismatch between ever-growing demand for T&A and limited natural resources needed for the sector (land, water, energy) resulting in environmental concerns related to emissions and waste

2. **Scarce human resources**
   - Quantitative and qualitative shortages of human resources becoming major constraints as a result of disintegrating national education and training systems, and international migration of employable people to the best job markets

3. **Fourth industrial revolution**
   - Revolutionary change brought on by social and environmental concerns
   - Automation and digitalisation of manufacturing processes that allows infinite and immediate adjustment of machinery, allowing the production process to accommodate different styles and small volumes

4. **New consumption patterns and business models**
   - New consume consumption patterns for customized, personalized and fast shopping experience
   - New business models and apps which allow customer to shop and personalize platform such as Amazon or Taobao.com and guarantee over night delivery.

5. **New forms of regulation**
   - Increasing consumer demand for transparency and measurement of environmental and social cost of products created new forms of regulations in the sector
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector
The experience of five of the leading TAVC countries were analysed to demonstrate critical factors that Ethiopia needs to consider.

- China
- Bangladesh
- Vietnam
- Sri-Lanka
- Mauritius

...the countries were selected based on the basis of their leading position in the world’s apparel export and value addition.

Source: WTO
Country Context - China

**Country Basic Facts**

- **Size of Economy (GDP)**
  - Source: WTO

- **Size of Population**
  - 1.38 Bn (2017)

- **GDP per Capita**
  - USD 8,797.18 (2017)

- **Value of Textile and Garment Export**
  - USD 267 Bn (2017)

**China's modern textile industry**

- Period featured two developments:
  - More than three quarters of enterprises were located in coastal cities like Shanghai, Tianjin, or Qingdao and
  - Raw materials, manufacturing, machinery and equipment were dependent highly dependent on foreign investment and countries

**China’s textile industry was prioritized**

- Early 1960s - China had a particularly slow development of its national economic, shortage of foreign exchange and suffered from the lack of materials. Government prioritized development of its raw materials (primarily, cotton together with wool, linen and silk textile, knitting and chemical fibre industry); Started exporting cotton, the only exportable product other than coal
- 1963-1967, government proposed a “three-line construction” (to move some important manufactories from coastal cities to western China and north-western China). After that, companies producing sewing machines, leather, cotton, wool, silk, dyeing, knitting, textile machinery and etc. spread in Western China.

**China becomes world’s largest exporter of Textile and Apparel market**

- 1978 - start of Reform and Opening Policy, and the start of fast development of China’s textile and apparel industry
- 1979 - Domestic garment enterprises established (small scale, weak technology but grew in to national brands)
- 1984 - self-sufficient in production of raw materials; cotton production was growing at 19% annually (was 125 Mn tam) and chemical fibre industry increased 17.1% annually.
- 1986 - government endorsed textile and apparel industry as a focus of export and foreign exchange; as such, exports of textiles and apparels entered a new level.
- 1993 - Export of Textile and apparel products became the largest export products in China valued at 21.7 Mn USD (more than doubled from the USD 10 Mn in 1986)
- 1994 - China became the world’s largest exporter of textile and apparel market with 35.55 Bn dollars in exports and 13.2% of global textiles and apparels; additionally, the structure of export from >80% of exports being semi-finished products in 1980s to more than 70% being finished garments in 1998

- Between 1995-2008, china increased their volume of global apparel export by 100% and their value by 500%
- 2001 - China joined WTO which opened up rapid expansion for the T&AVC. It opened up new markets and reduced tariffs. But with it came additional requirements
- 2001-2010 - additionally, buyers started requiring strict social, environmental, health and safety compliance. Chinese companies strived to improve both their technical and non technical operations, adding costs in the short term but dramatically strengthening capabilities (knowledge, expertise and technology).
Country Context - Bangladesh

Country Basic Facts

- **Size of Economy (GDP)**
  - USD 249.7 Bn (2017)
- **Size of Population**
  - 159.7 Mn (2017)
- **GDP per Capita**
  - USD 1,563.55 (2017)
- **Value of Textile and Garment Export**
  - USD 30.9 Bn (2016)

Bangladesh's TAVC Export Trajectory (in Million USD)

- **1970s-80s**
  - 1973: Started export of knitwear
  - 1978: Men's shirts to France by local firm; investment regime liberalized; JV est. with South Korean firm
  - 1980: Export Processing Zones Act, first EPZ established; back-to-back LC system & bonded warehouse subsequently introduced

- **1990-2000s**
  - MFA quota attracts FDI boosting industry
    - MFA Quota allocations attracted FDI (relied on quota for 90% of exports)
    - Ave. increase of 19% pa of RMG exports: increased from US $116 mill. in 1985 to US $866.82 mill. in 1990
    - RMG export factories grew from 50 in 1980 to 3,000 by 2000
    - Efforts made to remedy child labor problems in the sector
    - RMG exports held steady despite end of MFA quota in 2005

- **2010-2017**
  - RMG exports reached $25.4 Bn and factory numbers est. at ~7000 in 2015
  - Tragic fires & building collapses with significant loss of life + very low min. wage rates not reviewed for long; EPZs constantly criticized for restricting freedom of association; US suspended GSP privileges
  - ILO, EU, US imposed many safety schemes, labour law reforms & capacity building programs
  - Political strikes known as “hartals” cost the industry ~$1.4 – 2.2 bn.

- **Present**
  - Ties with Vietnam for #2 in global exports ($30.9 bn in 2017/18); set target of $50bn exports by 2021
  - But the many challenges: customs & logistics, electricity supply, fire & building safety, workers’ rights & welfare, political stability, security & safety, customs & logistics constraints – mean growth may have plateaued (0.2% growth in 2016/17 - slowest in 15 years and 7.3% < target)

  - Still dominated by 4 categories of basic apparel: T-shirts, men’s & boys’ shirts & trousers, sweaters & pullovers, women’s & girls’ trousers & shorts. The ratio of woven to knits shifted from 85:15 in the 90s to ~50:50 by 2015, mainly because of the stronger backward linkages in the knitwear sub-sector.

  - The knit garment sub-sector grew rapidly as composite manufacturers developed that produced their own fabric and had their own dye houses, reducing their costs and lead times.

  - The woven’s sub-sector was not able to establish the same fabric, dyeing and finishing capacity as the knit garment sub-sector. This was mainly because the investment required was at least USD 35 Mn in 2000, some ten times higher than for knits.
Country Context - Vietnam

Country Basic Facts

**Size of Economy (GDP)**
- USD 223.8Bn (2017)

**Size of Population**
- 94.5 Mn (2017)

**GDP per Capita**
- USD 2,368 (2017)

**Value of Textile and Garment Export**
- USD 32.2 Bn (2017)

Vietnam's TAVC Export Trajectory

**1980s-2000**
- 1986: Launched the “Doi Moi or Renovation” program
- 1994: USA lifted its trade embargo.
- 1995: Vietnam joined the ASEAN Free Trade Area (AFTA) and applied for WTO membership.
- Sector was dominated by State-owned Enterprises (SOEs) and a group of them were consolidated to form Vinatex. Modernization and upgrading has been slow

**1990-2015**
- 2005-06: Strike wave over minimum wages in foreign factories that had not been raised for seven years despite high inflation. As a result, the minimum wage was raised 40% and a system involving the Ministry of Labor, the VGCL, and the Vietnam Chamber of Commerce and Industry established to determine annual minimum wage adjustments.
- 2007: Joins the WTO and the last quota restrictions were lifted
- 2015: Vietnam becomes the third largest apparel exporter in the world, after China and Bangladesh.
- 2017: Exports reached USD 32.2 Bn (78% clothing); 16% of total merchandise exports (after telephone & mobile phones which comprise 19.6%)

**Present**
- > 6,000 textile and clothing companies, employing some 3.8 Mn people, with about 2,500 of them exporting, mostly located around Ho Chi Minh City and Hanoi. Some 70% of the companies are manufacturing clothing, 17% are producing textiles, 6% spinning yarn, 4% dyeing and 3% making accessories.
- The US takes about 40% of Vietnam’s T&A exports, followed by the EU at about 12.5%, Japan at 10.3% and South Korea at 8%.

Government support for sector – regional & global trade agreements help launch sector
- 1986: Launched the “Doi Moi or Renovation” program
- 1994: USA lifted its trade embargo.
- 1995: Vietnam joined the ASEAN Free Trade Area (AFTA) and applied for WTO membership.
- Sector was dominated by State-owned Enterprises (SOEs) and a group of them were consolidated to form Vinatex. Modernization and upgrading has been slow

US trade relations and WTO accession contribute to growth while strikes become a problem
- 2000: USA-Vietnam Bilateral Trade Agreement - permanent normal trade relations (PNTR) status. But the US does not recognize Vietnam as a Market Economy due to concerns about protections of human rights
- 2005-06: Strike wave over minimum wages in foreign factories that had not been raised for seven years despite high inflation. As a result, the minimum wage was raised 40% and a system involving the Ministry of Labor, the VGCL, and the Vietnam Chamber of Commerce and Industry established to determine annual minimum wage adjustments.
- 2007: Joins the WTO and the last quota restrictions were lifted
- 2015: > 90,000 workers in Ho Chi Minh City struck in response to a proposed change in social insurance law that would have prevented taking a lump sum pensions pay when workers stopped working (often in their late 30s). Strike succeeded in getting the law amended to give workers the choice between a lump sum pay out whenever they stop working, be it before, or at, the official retirement age.
- 2015: Vietnam becomes the third largest apparel exporter in the world, after China and Bangladesh.

Source: WTO
Country Context- Sri-Lanka

Country Basic Facts

- **Size of Economy (GDP)**
  - USD 88 Bn (2017)

- **Size of Population**
  - 21.4 Mn (2017)

- **GDP per Capita**
  - USD 4,112 (2017)

- **Value of Textile and Garment Export**
  - USD 5.3 Bn (2017)

**Sri-Lanka’s TAVC Export Trajectory**

(in Million USD)

- **1970s**
  - In 1970s, when they started, Sri Lanka had no raw materials, no factories, no skilled labour, no apparel industry; was overshadowed by India with its centuries old industry and big market.
  - Government provided:
    - Tax incentives
    - Export quota’s
    - Infrastructure
    - Stream lined bureaucracy for export sector
    - Created the 200 garment factory program

- **1985**
  - Martin Trust (President of Limited Brands) created several joint ventures with local partners which lead to major technology, knowledge and capital transfer

- **1992**
  - Board of investment created; a one a stop shop for investment with a single window clearance facility

- **Early 2000**
  - Because Sri Lanka was small, they did not try to compete with volume producers like China and India; They specialized in higher fashion content garments and intimates; they used air freight to reduce economic distance
  - They were dependent on import for exports; they started with CMT and upgraded their services, shortened their supply chain, reduced time and cost and extracted more value
  - They differentiated on labour standards, developed their own third party labour certification called Garment without Guilt with SGS
  - They differentiated on environment; did the first LEED certified factory buildings, used renewable energy, organic materials and created the world's first organic value chain
  - MAS holdings, one of the original Sri Lankan manufactures, now describes itself as a design-to-delivery solution provider and are now opening their first manufacturing and development centre in South Carolina

- **Present**
  - They were exporting USD 5 Bn/year, employed 600,000 people (300,000 direct, 300,000 indirect) with 80% women
Country Context- Mauritius

Country Basic Facts

Size of Economy (GDP)
- USD 13.2 Bn (2017)

Size of Population
- 1.26 Mn (2017)

GDP per Capita
- USD 10,476 (2017)

Value of Textile and Garment Export
- USD 719 Mn (2017)

Export led strategy and trade agreements help launch sector

- 1970s: adoption of export-led development strategy
- 1971: est. EPZ with incentives (e.g. 10-year tax holiday and duty-free import of raw materials) later replaced by a tax rate of 15%. Cheap labor + preferential trade agreements (MFA and the Lomé Convention) ensured the appeal of the Mauritian EPZ
- Development Bank offered unsecured loans to domestic SMEs to encourage them to move into the EPZ.
- Mauritius Development and Investment Authority (MEDIA), later the Mauritius Industrial Development Agency (MIDA), established to develop industrial zones and promote export-oriented manufacturing companies.
- Companies in the EPZ grew from 32 in 1973 to 568 by the end of 1990 and accounted for 63% of total exports by value, 51% of the manufacturing value added and 13% of the country's GDP.

Government policy shifted focus to diversification into other sectors; T&A remains important

- Government prioritized the diversification of the economy, especially towards services such as tourism, finance and ICT. Seafood grew in importance and Mauritius positioned itself as a regional seafood hub. The value of seafood products in total exports rose from 3% in 2000 to 23% in 2014.
- Today the textile and apparel industry employs 45,000 people in 174 factories and produces exports worth $719 Mn, including T-Shirts and Polo’s (70 factories), sports and work wear (30 factories), trousers and suits (48 factories), intimates and swimwear (26 factories) and accessories and trims (51).
1. Was there a central agency that coordinated the sector to upgrade and diversify?

The East Asian economies that were able to upgrade and diversify from textiles and apparel to electronics and automobiles all had a central coordinating agency or ministry that served as a combination of think-tank, policy maker and coordination mechanism for the line ministries involved.

- The Ministry of International Trade and Industry (MITI) played a key role in developing and implementing industrial policy especially during the period of reconstruction and growth from 1950 to the 1970s.
- MITI regularly monitored the needs of the industry and coordinated closely with the companies and sub-sectors that it was supporting. Deliberation councils, committees and study groups, sometimes with the big industrial associations, were all used to ensure that policy reflected the ever changing reality of industry, and industrial strategies were revised every one or two years to ensure their pertinence.
- MITI, in addition to strategy and coordination, worked on issues that were beyond the scope of companies (individually or collectively) such as R&D, infrastructure, trade negotiations and overall business environment.
- Statutory authority with cross-cutting roles - combining planning, strategy and coordination functions to promote FDI, boost exports, increase jobs, and upgrade and diversify the economy.
- Responsibility for the mobilisation and allocation of capital, forex reform, industrial policy and investment promotion, deregulation or liberalisation, and later for dealing with externalities such as sustainability and social responsibility.
- Structure, function and strategies of these agencies were not static and they evolved along with the changing political, economic and social context in order to maintain their relevance.

- After Deng Xiaoping launched the opening-up strategy in the late 1970s, a State Council Office for Special Economic Zones and Opening-Up was created in order to conceptualise and implement the SEZs.
- In 2003, the State Council Office for Restructuring the Economic System and the State Economic and Trade Commission were merged to form the National Development and Reform Commission (NDRC), a super-Ministry with 26 functional departments; develops five year plans, investment strategies, industrial policies and economic restructuring programmes.
- The Singapore Economic Development Board (EDB) was also established in 1961 to attract investment and create jobs. It became the lead government agency for planning and executing strategies to ensure Singapore’s position in the global economy. The EDB envisions, plans and delivers medium term strategies that position Singapore as a venue for investment, originally in labour intensive manufacturing and later in capital intensive and high-tech industries.
- The Mauritius Development and Investment Authority (MEDIA), later the Mauritius Industrial Development Agency (MIDA), was established to develop additional industrial zones and promote export-oriented manufacturing companies.

There are examples of countries that developed competitive export sectors without a central coordinating agency to drive a clear strategy, but those ad hoc or unplanned strategies have limitations.

- The Board of Investment (BOI) was merged with the Privatisation Commission to form the Bangladesh Investment Development Authority (BIDA) in 2016, which is the principal private investment promotion and facilitation agency. There are two industry associations, one for woven products - the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), and one for knits - the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) that act as lobbies for the industry, but issues such as R&D, infrastructure, logistics, customs, sustainability and skills are beyond their remit and receive inadequate attention.
- The Bangladesh Export Processing Zones Authority has done a reasonable job of managing the EPZs but they have only developed eight zones in 30 years with a total of 497 tenants.
- Bangladesh saw impressive growth in apparel exports from both locally and foreign owned companies but after 40 years they have failed to upgrade or diversify their exports. They are concentrated in a small number of product categories and markets and highly vulnerable to external shocks. The logistics system, port and airport infrastructure are still far from competitive and customs remain a bottleneck.

Key Characteristics
- Statutory authority with cross-cutting roles - combining planning, strategy and coordination functions to promote FDI, boost exports, increase jobs, and upgrade and diversify the economy.
- Responsibility for the mobilisation and allocation of capital, forex reform, industrial policy and investment promotion, deregulation or liberalisation, and later for dealing with externalities such as sustainability and social responsibility.
- Structure, function and strategies of these agencies were not static and they evolved along with the changing political, economic and social context in order to maintain their relevance.
2. Have backward & forward linkages been forged?

<table>
<thead>
<tr>
<th>Country</th>
<th>Characteristics</th>
<th>Notes</th>
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<tbody>
<tr>
<td>China</td>
<td>The most complete and comprehensive value chain on the planet - a model that every one aspires to emulate.</td>
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<td>Gov. applied four strategies to develop the T&amp;A VC: Bring In, Go Up, Go West, Go Out</td>
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<td>Government drove the development of the full value chain by offering incentives that rewarded foreign and Chinese investors who sourced inputs locally.</td>
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<td>Government also offered incentives to encourage the development of local R&amp;D, new technology, and higher value addition.</td>
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<td></td>
<td>Government promoted the development of clusters and by 2010 there were 146 T&amp;A clusters.</td>
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<tr>
<td>Mauritius</td>
<td>MFA quota required both assembly and finishing take place in Mauritius, whereas the Lomé Convention that provided for quota and duty-free access to the EU market specified that both assembly and one pre-assembly process take place in the country. As a result, almost all apparel exporters had backward linkages to yarn or textile mills and many were vertically integrated.</td>
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<td>US requirements taught exporters process skills while those of the EU market obliged them to acquire a wider range of functional skills and capacities.</td>
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<td>Bangladesh</td>
<td>Limited supplies of cotton; only produces some 3% of the cotton required by the T&amp;A VC; relies on neighbor India. Imports of cotton cost ~ US$ 3 Bn pa.</td>
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<td>Imported cotton - Government provided incentives for the import of cotton and investment in textile manufacturing to make up for the shortage of raw materials, yarn and fabric but the industry remains dependent on cotton imports. (~ 800,000 MT of cotton in 2012)</td>
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<td>Initially, all fabric, accessories and trims had to be imported, the knit sector has developed local supply.</td>
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<td>Government has recently incentivized other backward linkages but investment has yet to materialize.</td>
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<tr>
<td>Vietnam</td>
<td>Heavily dependent on imported raw cotton, man-made fibres, yarns, fabrics and accessories</td>
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<td>Imported materials made up about 80% of the total export garment value between 2007 and 2011 and still account for around 70%. Vietnam does produce some yarn and textiles but the quantity and quality are too low to meet export requirements. Local cotton producers supply only 0.04% percent of the textile sector's demand.</td>
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<td>There is insufficient dyeing and finishing capacity and this acts as a major constraint.</td>
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<td>In anticipation of TPP and the EU-Vietnam FTA’s “yarn forward rule” that requires all production steps of export apparel to be sourced in member countries, Chinese, S. Korean and Taiwanese companies started investing in yarn and textile mills.</td>
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<td>Vietnamese SMEs are mostly subcontractors to FDI vendors who receive the orders from international brands and retailers. Some of the more capable SMEs may receive FOB orders directly from international buyers but they are limited.</td>
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3. Has the sector upgraded, diversified and increased value addition?

**China**
- Yes, both as a result of government policy and incentives and inclusion in global value chains.
- Gov. drove the expansion of the sector in the 1990s and the upgrading after 2000.
- The value added in the T&A VC increased 13% pa from 1980-2008 in real terms.
- Gov. encouraged upgrading by providing fiscal (tax rebates) and financial (infrastructure) incentives.
- Gov. also set higher technical standards and targets for value addition, creating a market for upgrading.

**Sri-Lanka**
- Because Sri Lanka was small, they did not try to compete with volume producers like China and India; They specialized in higher fashion content garments and intimates;
- they used air freight to reduce economic distance
- They were initially dependent on import for exports but they started with CMT and then added more functions and services to upgrade, shorten the supply chain, reduce time and cost and extract more value.

**Mauritius**
- As labor and other costs rose, some exporters moved up the ladder and produced higher value added items such as “Scottish” knitwear whereas others relocated production to Madagascar and continued to produce basics, relying on the lower cost structure of their neighbor.

**Bangladesh**
- RMG exports are still concentrated in a few low value-added product categories and essentially unchanged between 1990-2010.
- Within the dominant “basics” category, there has been a relative shift from woven’s to knits. In the early 1990s the ratio of woven’s to knits was 85:15, but by 2015 it had become almost 50:50, mainly because of the stronger backward linkages in the knitwear sub-sector.
- Unclear if Bangladesh will remain competitive in low-margin sectors which are highly price sensitive. Bangladesh may start to lose price competitiveness, and hence orders, as it invests to improve factory safety and workers welfare.
- Additionally, upgrading to higher fashion content is difficult as it is far from major markets, and lead times are too long. They may however be able to do higher value added constructed garments that are not fashion sensitive.

**Vietnam**
- 2015 UNIDO study reported that while Vietnam had experienced impressive growth in exports, the amount of value added fell by half, from 20.3% to 13.2% between 2006 and 2013.
- 70% of the 2,500 garment exporters are working on a CMT basis at the bottom of the value chain, and only some 20% are doing FOB production. Some 9% are doing original design manufacturing (ODM) and 1% are engaged in original brand manufacturing (OBM).
- High % of SMEs and old SOEs in the sector are holding back investment in upgrading and diversification.
- Additionally, lack of upgrading (both technology and human resources), and import dependence, are limiting the number of full-package orders received from international buyers.

The added value of textiles and garments in Vietnam is very low. Vietnam’s role in the global supply chain does not occupy an important position – the only advantage Vietnam has over others is our affordable source of labour.  
Vice-President of the Vietnam Textile and Apparel Association
### 4. Was there transfer or localization of skill and technology from FDI?

**FDI LED - Extensive localization**

- **Bangladesh**
  - FDI, esp. from Korea was important catalyst: the industry is comprised of two parts, with FDI mainly in the EPZs and locally owned exporters mainly in the domestic tariff area (DTA). Overall, some 95% of export units are locally owned.
  - There has been a significant skill and knowledge transfer. Managers & workers trained by foreign companies (mainly Korean) went on to work for other companies, or founded their own.
  - Pressure from foreign buyers, trade unions, NGOs, IOs and gov. led to extensive programs of social audit, certification and reporting that led to improvements to production, organization & management.

- **Vietnam**
  - Vietnam’s export growth is largely driven by FDI and it accounts for 72% of Vietnam’s total exports at present.
  - The same is true for the leather and footwear sector where the industry association LEFASO notes that FDI manufacturers account for over 80% of the leather and shoe exports because Vietnamese-owned companies lack the resources to expand production or market share.
  - There has not been technology or skill transfer. Localisation takes the form of mostly-foreign vendors placing orders with local suppliers, but this has not enabled the local SMEs to upgrade.

- **Mauritius**
  - FDI came from Hong Kong entrepreneurs looking to escape quota restrictions, and from India, but much of the capital for Mauritian export production was raised locally.
  - Mauritian investors were prominent and by 1995 a full 50% of the equity involved in export production was local.
  - Managers trained by foreign owned firms went on to found local firms.
  - The growth of the export sector raised total factor productivity after 1990 and well into this century.

- **Sri Lanka**
  - Yes, thanks in part to the Joint-Ventures established by Martin Trust and by companies such as YKK, Esquel, Triumph, Speedo and Kellwood.
  - Sri Lanka has developed some textile capacity and now supplies about 25% (by value) of its fabric needs. However, the lack of raw materials, high cost of machinery and expensive electricity discourage investment in the sector.
  - Sri Lanka benefits from the proximity of India and other regional suppliers of fabric (China and Hong Kong). Sri Lanka has excellent sea and air connections and a lot of Indian cargo is actually transhipped in Sri Lanka so frequent delivery options existed. This regional supply chain meant that the lack of backward linkages was not a constraint.

**FDI LED - Limited localization**

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5. What challenges did the country face? (across VCs)

**China**
- China started with a very weak economy in the 1970s but prioritized textiles and apparel as an export sector.
- Abundant labor meant that the industry could grow quickly and smart government incentives facilitated the development of the full value chain in clusters.
- The government constantly raises wages and standards, driving companies to upgrade and become more productive. As a result, Chinese unit labor costs continue to fall and it has maintained its dominant position in the world market.
- China has now embarked on “Manufacturing 2025” strategy that emphasizes higher technology industries and greater automation. T&A will therefore shrink as a % of total manufacturing, but remain a major player, probably concentrated on the domestic market rather than exports.

**Bangladesh**
- Low wages, inadequate workers’ accommodation, poor working condition has tainted the sector
- Too far from major markets, and lead times are too long: increased emphasis on speed-to-market will make it very difficult to upgrade
- Non-tariff barriers and poor freight connections made it difficult to reach Asian market
- Risks losing price competitiveness, and hence orders, with improvements in safety & welfare
- Sub-contractors that do not meet international social, labour and environmental standards are extensively used
- Infrastructure (buildings, roads, electricity, water, port logistics) is weak and does not meet international standards
- Politically motivated general strikes are frequent and may cause major disruption.
- Water risk is critical
- Skills shortages remain. The skills shortage is estimated at 25% at all levels (workers, supervisors and middle-management). There are about 20,000 expatriates still employed in the sector who cost some US$ 5 Bn annually.

**Vietnam**
- High interest rates make it hard for SMEs to access credit to finance FOB orders
- Wage increases: gov. increased minimum wage at an annual average rate of 18% between 2010 and 2015. The rate of increase slowed after (12.4% in 2016 and 7.3% in 2017). The monthly wage in Hanoi and Ho Chi Minh City (HCMC) is US$166.
- The Ministry of Labor’s Minimum Wage Adjustment Road Map to 2020 projects minimum wage in Region One (Hanoi and HCMC) rising to US$ 213 pm in 2020.
- Statutory social security contributions for employers & workers add 34.5% to the minimum wage. Social insurance issues will probably lead to industrial unrest over the next decade.
- SMEs struggle to increase productivity fast enough to absorb the wage increases. (Ave. increase in productivity = 5% Cf. double-digit% wage increases.)

**Sri Lanka**
- Sri Lanka had a small population, no raw materials, limited fabric supply and high import tariffs on textiles. It was able to overcome these limitations and become a world leader in the production of intimates, swimwear and sportswear.
- The secrets of this success were close relations and partnerships with major foreign brands, incentives for foreign buying offices to locate in Sri Lanka, niche production or specialization, a constant emphasis on increased services and value addition, shorter lead times and flexibility.

**Mauritius**
- Mauritius had thriving sugar and tourism sectors, and yet the textile and apparel sector was able to take off and drive the growth of manufacturing and diversification of the economy. Like Sri Lanka, local capital and entrepreneurs played leading roles, as did high quality human resources.
- Mauritius has used skill and welfare funds to ensure a stable and productive workforce.
- Trade agreements forced them to develop backward linkages and this has enabled them to reduce lead times and increase flexibility.
- Mauritius has continued to diversify the economy (fishing, finance, IT) and competition for labor is intense. Companies have been importing migrant workers and outsourcing some work.
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector

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4. Recommendations and Road Map
   - Recommendations
     - Issue Area Recommendation
     - Thematic Area Recommendation
   - Competitive Assessment
   - Implementation Roadmap
The Textile & Apparel sector has a long history in Ethiopia

- Ethiopia has a rich history of traditional handloom and cotton industry for more than 3,500 years.
- Traditional cotton industry consists of spinning by mostly women & weaving by men to turn homespun yarn into fabric and provide to market; fabric is used to make traditional clothes.
- Traditional industry continues to grow providing large-scale employment with increasing demand for traditional clothes.

**Ethiopian Textile & Apparel Sector**

**1900-1970s**
- 1939: First garment factory – Dire Dawa Textile Mills
- Growing cotton production
- 1950s: first garment factory Addis Garments established
- Garments sub-sector mainly focused on domestic market with small export
- 1960s: Expansion of the sector with establishment of five large, private integrated mills

**1970-91**
- Nationalization of private companies
- Opening of 4 integrated textile mills
- Factories operating below capacity because of old technology & limited varieties

**1991-2000**
- 1991: Privatization of cotton farms and T&A factories; removal of subsidy for garments export
- Factories refocused on domestic market & exports decreased
- T&A prioritized as a strategic sector

**Present**
- 179 companies (of which 63 are foreign) that cover the entire chain
- Ranging in size from (some employ > 6,000 workers)
- 14 JVs between private & gov., the rest are private
- Sector employs >450,000 workers (2013)
- Renewed emphasis on sector under GTP II with dedicated IPs
- New FDIs over the past few years have been contributing significantly to the growth of the sector
While global trends are favorable, Ethiopia is currently a small player, but has budding potential.

- Ethiopia’s performance is lower than benchmark countries in east Africa (Kenya and Tanzania)
- While Kenya has been performing strongly, Tanzania’s performance has been more volatile, showing a rapid increase in exports between 2013 and 2015, followed by a rapid decline the following year

**Attractiveness of the Ethiopian market**

- Buyers are attracted to the Ethiopian market for several reasons mainly related to cost
- Ethiopia has one of the lowest electricity tariffs in the world (USD 0.05 per kw/h) which is largely produced from renewable sources
- Ethiopia’s average labour rate in the garment industry is approximately USD 26 per month–13% Kenya’s rate and one-third Bangladesh’s
- The country has a strategic location near Asia and Europe, and duty free access to the European Union and United States
- The new electricity-driven railway is anticipated to cut transportation time and cost by 50% from factory to port, although this has not yet been realized
- GoE is dedicated to developing the sector and has implemented several initiatives to promote its growth

**Total textile and apparel exports for Ethiopia compared to benchmark countries over time (in USD millions)**

GoE has prioritized the textiles and apparel sector and aims to achieve $30 billion in T&A exports by 2025

**Ethiopian Context**

- The Government of the Federal Democratic Republic of Ethiopia has made the development of the textile industry a national priority.
- This priority is reflected in both the first Growth and Transformation Plan (GTP I, 2010-2015) and the second Growth and Transformation Plan (GTP II, 2015-2020).
- The country’s textile industry is a key sector for the achievement of middle-income status by 2025 through “Agricultural Development Led Industrialization”
- GTP I, among other investments, increased the cotton cultivation area to 256,000 hectares, productivity to 2.5 tons per hectare, and produced 48 distinct investments in the textile sector, ultimately aiming to provide 40,000 new jobs.
- GTP II continues to emphasize the development of an export-oriented manufacturing sector. GoE has provided incentives to attract investors into the Ethiopian textile industry.

**The Targets of the Government of Ethiopia**

- GoE aims to achieve $30 billion in textile and apparel exports by 2025.
- The vision is to lead the African textile and garment sector in global competitiveness by realizing a sustainable, diversified, and conducive business environment by 2025.
- Specifically to achieve this vision, GoE has set specific goals:
  - Achieve 85% machine utilization
  - Increase man power productivity by 100%.
  - Achieve 30% Uster statics yarn quality
  - Establish 5 well equipped research institutions with researchers
  - Increase the seed cotton yield per Hectare by 100%.
  - Achieve 89% yarn realization
  - Increase textile and garment graduates by fivefold
  - Tool 25% of the sector with state art technology
  - Improve cotton cultivation area from 80,000 Hectare to 500,000

<table>
<thead>
<tr>
<th>$30 Billion</th>
<th>85%</th>
<th>100%</th>
<th>30%</th>
<th>89%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports in Textile &amp; Apparel Sector by 2025</td>
<td>Machine Utilization to be Achieved</td>
<td>Increased Man-power Productivity</td>
<td>Uster Statics Yarn Quality to be Achieved</td>
<td>Yarn Realization to be Achieved</td>
</tr>
</tbody>
</table>

Source: ETIDI, Textile and Garment Technology Roadmap
Exports increased by an average of 68% in 2019 as compared with 2018. A Just-Style study estimated an annual increase of 51% between 2009 & 2015. Export of cultural clothes raised 3.4 Mn USD in 2016.

There has been increased investment by both domestic and foreign companies (domestic companies accounted for 29% of total exports in 2015/16.)

T&A exports have shown an increasing trend in the past two years by an average of 38%. This is due to the recently opened industrial park in the country.

In addition to fabric and garments, Ethiopia exports cotton and yarn. In 2017, 2.8 Mn USD worth cotton and 11.2 Mn USD yarn were exported. This indicates the gaps in the value chain where local inputs for the textile & garment industry are exported while companies on the other hand rely on imports to meet their needs.

Nearly 60% of Ethiopian exports are to US – largely due to big export volumes of TCP and PVH. In 2019/20, exports to the US, Germany and Italy comprises 81% of the total textile and garment exports.

Other major export destinations in 2019/20: Turkey (5.5 Mn), UAE (3.1 Mn), Canada (2.9 Mn), Spain (2.5 Mn), China (2.1 Mn)

Source: ERCA, ETIDI Roadmap, Team analysis
Big mismatch between needs of the industry and local supply results in growing trade deficits as T&A companies rely on imports for almost all of their inputs.

**Insufficient local supply implies reliance on export...**

- Local supply significantly falls short of the growing demand of the T&A sector which leads to trade deficit. Local cotton is used by the few integrated textile mills while the majority of stand-alone garment companies rely on imported fabrics.

- Almost all non-fabric inputs such as trims, accessories, packaging, machinery and spare parts are imported from abroad. With growth in the sector and increased production, trade deficit is a mounting problem. In 2016, Ethiopia imported:
  - Yarn - 71.8 Mn USD (99% synthetic yarn, the rest cotton & wool yarn, and very small silk yarn)
  - Fabric - 148.6 Mn USD
  - Garment – 384.5 Mn USD

- Most of the imports come from China and India which account for 91% and 5% of the trade deficit respectively in 2016. The other major origins of import are Indonesia, Turkey, Thailand, Saudi Arabia, and Pakistan.

**Leading to uncompetitive T&A companies as it results in:**

- Increased cost of production
- Low productivity
- Inability to meet strict lead time requirements of the international market and hence loss of markets

### Trade deficit in textile & apparel, in Mn USD (2012-2016)

**Yarn**
- 2012: -45.56
- 2013: -31.02
- 2014: -46.74
- 2015: -61.2
- 2016: -60.62

**Fabric**
- 2012: -113.96
- 2013: -122.73
- 2014: -129.64
- 2015: -175.17
- 2016: -135.88

**Apparel**
- 2012: -205.15
- 2013: -222.8
- 2014: -271.6
- 2015: -347.58
- 2016: -320.39

Source: MoR, ETIDI Roadmap, Team analysis
To help reach this goal GoE has set a number of initiatives to promote growth of the sector:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Progress to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategies</td>
<td>• Adoption of the National Cotton Development Strategy (NCDS) in 2017&lt;br&gt;• Formulation of the Textiles and Clothing Value Chain Roadmap by ETIDI and ETGAMA&lt;br&gt;• SME Cluster Development Plan</td>
<td>• The NCDS is expected to boost production and productivity of the cotton industry&lt;br&gt;• The SME cluster development plan has identified areas for setting up clusters to create linkages</td>
</tr>
<tr>
<td>Programs</td>
<td>• ETIDI together with public and private partners are supporting HIPSTER, a programme to source, select, grade and train in soft skills for Hawassa Industrial Park&lt;br&gt;• EIC’s value chain development program</td>
<td>• HIPSTER is set to train 30,000 workers to help companies source skilled labour&lt;br&gt;• EIC’s 8-year, $200 million project to increase SME’s access to finance, begun in 2016 but is not specific to T&amp;A sector</td>
</tr>
<tr>
<td>Incentives</td>
<td>• Provides attractive incentive package covering, among others, tax holidays, duty free imports and full repatriation of profits&lt;br&gt;• Also offers land lease up to 80 years with zero charge for factories &amp; residential quarters</td>
<td>• Have encouraged foreign investors (~65 textiles projects signed in the last 6 years), but do not address financing, forex and logistics challenges&lt;br&gt;• Have influenced location selection within Ethiopia (e.g. greater benefits away from Addis)</td>
</tr>
<tr>
<td>Infrastructure &amp; Institutional Support</td>
<td>• Development of 23 industrial parks (IPs), 10 of which completed between 2014 and 2019 for the T&amp;A sector but also heavy and agro-industries &amp; one-stop-services for investors&lt;br&gt;• Establishment and strengthening of EIB, EIC, and the IPDC</td>
<td>• IPs have lowered entry and operational barriers; in 2017, Hawasa Industrial Park alone was home to 20 T&amp;A companies from 11 countries; by 2019 the industrial parks in operation had created over 70,000 jobs.&lt;br&gt;• Relevant institutions have attracted and assure several investors of government commitment</td>
</tr>
</tbody>
</table>

Many other stakeholders have also introduced programs to address existing challenges.

<table>
<thead>
<tr>
<th>Actor</th>
<th>Program</th>
<th>Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DfID, PVH</td>
<td>Capacity Development and labour Force Coordination</td>
<td>Implemented in in Hawassa IP; where PEPE offers a short training course before the first day of work to <strong>develop skills required by PVH and other employers</strong>. Seeks to <strong>allocate new employees through a centralized process to reduce turnover</strong>; still in preliminary stages</td>
</tr>
<tr>
<td>GIZ</td>
<td>Sustainable Training &amp; Education Program</td>
<td>A EUR 17 million program – includes a training program, in partnership with ETIDI and Hawassa Industrial Park Association, for <strong>supervisors at Hawassa IP on environmental and other topics</strong>; a modular training program to be <strong>implemented by TVET institutions in partnership with the private sector</strong>, and <strong>creating links between businesses &amp; universities</strong> in order to enhance skills and competence of graduates</td>
</tr>
<tr>
<td>SIDA, H&amp;M (funders) and ILO (implementer)</td>
<td>Improving Industrial Relations for Decent Work &amp; Sustainable Development</td>
<td>Three-year, USD 3M project launched in early 2016. Aims to assist government, social partners, and industry stakeholders to <strong>improve productivity, social dialogue, wages and working conditions</strong></td>
</tr>
<tr>
<td>Solidaridad</td>
<td>Better Mills Initiative</td>
<td>Three-year, EUR 0.8M project to <strong>improve the S&amp;E performance of textile mills and garment factories</strong>; 2016-2018</td>
</tr>
<tr>
<td>World Bank</td>
<td>Competitiveness and Job Creation (CJC) Project</td>
<td>USD 270 M World Bank project launched in 2014 with the aim of <strong>creating jobs through working with IPDC to establish industrial zones and create linkages with the local economy</strong>. The fund supports private firms to cover costs of capacity building necessary for linkage</td>
</tr>
<tr>
<td>World Bank</td>
<td>SME Finance Project for Ethiopia</td>
<td>Five-year USD 200M project launched in 2016 in collaboration with DBE to increase SME finance, but <strong>not specific to T&amp;A sector</strong></td>
</tr>
</tbody>
</table>

Source: Dalberg, Ethiopia’s Competitiveness in the Garment Industry, 2017, Company websites
Despite the ambitions of GoE and the private sector, garment industry growth in Ethiopia has not yet met expectations

Meeting GoE expectations will require identifying industry challenges, diagnosing their root causes, and developing initiatives to address them

Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector
## Volume

<table>
<thead>
<tr>
<th>Fabric sourcing and production</th>
<th>Non-fabric inputs production</th>
<th>Garment production</th>
<th>Packaging and exporting</th>
</tr>
</thead>
</table>
| • 2.6M hectares suitable for cotton, only 80,000 under production  
• 21 ginning factories  
• 38 vertically integrated factories with a spinning, weaving & finishing dept.  
• 12 standalone knitting and weaving companies  
• 5 spinning plants  
• 7 handlooms factories | • 1-3 local accessory producing factories  
• 1 international inter-lining producer  
• 1 international labelling company | • 20 international garment manufacturing factories – all 20 sell 100% of their pieces to exporters  
• 78 local garment manufacturing factories – just ~14 sell to exporters (8 local garment manufacturers also produce yarn) | • 8 global buyers (others with small “test orders”)  
• 1 carton producer  
• No poly-bag or hanger producers |

## Size

<table>
<thead>
<tr>
<th>Export VS Domestic Focus</th>
</tr>
</thead>
</table>
| • Most cotton is sold to domestic manufacturers and ends up in local markets  
• This is due to low quality and low supply (can’t meet exporter demand) | • Local accessory producers mainly sell to domestic markets  
• Most non-fabric inputs used by exporters are imported | • Mandatory for international manufacturers to export  
• ~1/3 local manufacturers export and sell to local market; ~2/3 only sell to local markets | • ~60% of textile and garment exports are sold to Europe  
• ~40% sold to the US |

## Export VS Domestic Focus

| Source: Textile and Garment Technology Roadmap, 2016 |

Across the value chain, most of the activity in Ethiopia is concentrated in garment production.
1. Ethiopia’s great potential for production of cotton and other fibres is underutilized

Cotton
• Vast majority of fibre produced
• 3Mn ha - ~10% of the global cotton area - suitable for cotton cultivation at competitive lease price (~1.15 USD/ha for undeveloped land with 40 year lease) < 5% of which has been cultivated
• Production cost of Ethiopian cotton is significantly lower than major producers (66.3% of Chinese, 57.3% of American)

Other fibres
• Currently very small production of wool and silk filament – for household use
• Potential to produce natural fibres yet to be exploited:
  • Wide availability of bamboo fibre
  • Favorable conditions to breed silkworms (SNNPR & Amhara regions) for production of silk
• Preferential market access (esp. AGOA) - great competitive advantage in exporting garment from synthetic fibre, however, cotton still preferred because:
  • Potential for local production limited as raw material (petroleum) not locally available – hence would add to problem of trade deficit
  • Serious environmental implications: water & chemicals, effluent treatment & recycling

Despite great potential, cotton production is limited and production greatly fluctuates from year to year as farmers switch to other crops (esp. sesame) due to low cotton yield and problems in supply of inputs (seeds, pesticides…)
If Ethiopia increases amount of land under cultivation to full potential, it would be able to compete with Pakistan (2.7 Mn ha) and China (3.2 Mn ha)

Production
• Majority medium-staple (ave. 28 mm. irrigated & 26mm rainfed)
• > 90% of the planted cotton seed variety is DP-90
• Ave. yield fluctuates- 666 kg of lint in 2019/20 (Cf. African ave. of 336 kg/ha and world average is 603 kg/ha)

Who are the actors?
Smallholder farmers account for 25% of the total cultivated area

Source: ETIDI, National Cotton Development Strategy (2017 draft); USAID, Strengthening the Cotton, Textile and Apparel Value Chain in East Africa: An Assessment (2014); ICAC study; KOIKA study; team analysis, ETIDI, 2020
Almost all of the cotton produced for local consumption; many constraints affecting cotton production

- Ginning capacity - 406,500 tons of lint cotton but operate at capacity utilization of only 45-50% (55,000 tons); 21 private ginneries (19 operational)

Key constraints

- Misaligned incentives: weak links between cotton growers and ginneries (and the rest of the VC) makes it difficult to sufficiently incentivize farmers to produce cotton and at the required quality. Farmers may switch to other crops such as sesame as market prices shift leading to large fluctuations in output and limits the investment in improved farming techniques.
- Fragmented farming system: provision of land is a major issue for cotton sector; weak contractual agreements between smallholders & ginneries
- Productivity: varies widely depending irrigation use: yields can reach 30-35 q/ha with irrigation vs. rain based production yields stand at 17-25 q/ha; compared globally yield is too low. Insufficient availability of inputs (seeds and pesticides) for rain-fed cultivation, and limited access to finance for irrigated cultivation, results in high cost & low production
- Limited cotton variety: the same type of cotton seed, DP-90, has been planted for the past twenty years; efforts being made to develop better varieties.
- Low quality: due to fragmented farming system and poor production, harvest and post-harvest techniques. E.g. knitted products require min. of 28mm staple length (v. ave. of 26mm for rainfed cotton)
- Contamination: biggest problem, results from poor picking practices; can only be detected at dyeing stage – increased cost & delayed delivery as it implies restarting the process

Companies prefer local cotton as importing involves a lot of administrative burdens and delays including prior approval from ETIDI & MoI.
- Low quality of local cotton results in high cost and wastage negatively impacting productivity.
- As local cotton hence fails to meet standards, companies are forced to import despite lengthy import processes.
- Actual comparison between local and imported cotton as experienced by a vertically integrated exporter in Ethiopia shows disadvantage of local cotton at current quality levels:
  - Weight and grade unreliability, lower humidity and greater contamination, makes local cotton harder to work with
  - Results in machines running at a slower rpm & producing fewer t-shirts creating a difference of EUR 144,000 for each 100 tons of cotton.

![Cottons and Ginneries Diagram]

| Source | Cotton Strategy, Survey result, Team analysis |
2. Limitations in weaving & knitting capacity as well as washing, dyeing, and finishing facilities restrict possibility of diversification and upgrading

**Ethiopian Context**

**Industry structure & size**

**Spinning**
- Installed capacity: 309,000 spindles, 23,500 rotors, 153.6 Mn kg yarn but average capacity utilization of only ~60% (57.5 Mn kg yarn); spinning operates at a loss unless capacity utilization reaches 90%
- Output: Mainly 100% cotton yarn (and small polyester); annual production ~102,000 tons of yarn at utilization rate of 70% (2015)

**Weaving & Knitting**
- Inputs: >90% of cotton yarn purchased from domestic spinning companies, although some foreign supply is imported in order to meet demand. Synthetic filaments are 100% imported (USD 71.8 Mn worth of yarn in 2016)
- Outputs: 100% cotton, 100% polyester or mix of two cover 90% of the local production; other products - towels and home textiles. Fabric not used by garment sector is exported (Turkey, China, Italy, Germany, US, UK) Total production est. ~ 207 Mn meters of woven fabric and 50 Mn kg of knitted fabric (50% and 45% capacity utilization respectively)

**Washing, Dyeing, Finishing (WDF)**
- Capacity: 17 tons of fibre dyeing, 91 tons of yarn dyeing, 72 tons knitted finishing, ~ 555,000 m2 woven finishing

**Who are the actors?**

**Spinning**
- Only 8 stand-alone & 19 semi-integrated spinning mills [Cf. Bangladesh > 430 spinning mills that supply 90% of yarn for the knitwear sector and 40% of needed fabric to woven sector.]

**Weaving & Knitting**
- 3 home textile, 6 fabric producing, 4 integrated fabric/textile enterprises, 19 semi-integrated mills and 8 integrated mills, plus many households operating handlooms.

**Washing, Dyeing, Finishing (WDF)**
- 3 stand-alone dyeing & printing enterprises + 16 semi-integrated and integrated textile mills (13 private, 2 state-owned, 1 public-private JV)
- 7 enterprises process woven fabrics, 3 process knit fabrics

**Key constraints**
- Mismatch between needs of spinning mills and majority cotton variety (DP 90)
- Limited capacity due to machine downtime; max. of two shifts/day, weak sales capability & shortages of inputs.
- Poor quality: poor technology & techniques results in a lot of rejects and rework as products fail to comply with international standards; supply to domestic market instead
- Utility problems: industry requires uninterrupted power and water supply; power interruption is a significant cause of the high levels of rejects and rework.
- Skills shortage: lack of technical know-how and practical experience of local employees

**Implications**
- Limits flexibility & speed to market hence reduced competitiveness
- Limited production & low quality restricts possibility of diversifying & upgrading
- Big supply gap; increased reliance on imports for textile and apparel production leading to trade deficit and shortages Forex shortage

**Source:** ETIDI, Team analysis
3. Insufficient output at earlier levels has made the apparel sector dependent on imports and affected its competitiveness

**Ethiopian Context**

**Industry structure & size**
- Inputs: only 10% of fabric used by garment sector is local
- >50% operate on a CMT basis, require semi-skilled labor
- Capacity: 24,000 pieces of annual garment processing; operating significantly below capacity

**Who are the actors?**
- Total of ~ 200 garment producers: 22 integrated apparel factories that produce yarn, fabric & apparel; 106 apparel factories; 6 cultural clothes producing companies
- ~ 80 local SMEs producing garments; >80% located in Addis Ababa and its vicinity; <20% supply to international markets as:
  - Limited access to market, insufficient gov. support for local manufacturers; technology limitations – most are not well-equipped to meet stringent requirements of the international market whereas the domestic market is flexible, less stringent and offers higher returns in the short term
  - Export performance widely fluctuates as even the SMEs that export do not typically have long-term contracts with buyers
- ~ 100 foreign companies producing garments; almost all supply exclusively to international market and are increasingly situated in IPs
  - Most import almost all of their inputs as local supply is both insufficient and often fails to meet strict international standard requirements; duty free import makes it cheaper to import than sourcing locally
- 9 major buyers are sourcing from Ethiopia: H&M, PVH, Next, Walmart, Primark, Tesco, Marks & Spencer, Superior Uniform Group, Decathlon
  - Vanity Fair plans purchase $1 Bn worth of products by 2020.
  - Their key considerations are: low labor cost, availability of raw materials, and proximity to the European market

**Key Constraints**
- **Dependence on imports**: as they are duty free and competitively priced while local supply of both fabric & non-fabric inputs is insufficient. Ethiopia is far from the main Asian suppliers however, and the cost and lead time can be high given that the finance, logistics and customs systems are expensive and slow.
- **Low efficiency**: average efficiency of apparel companies is est. at 54% (ETIDI) partly attributed to low efficiency of labor & poor management
- **Limited capability**: many companies are limited to producing on CMT basis; limitations in working capital being a big hurdle to expansion
- **Limited products**: uncompetitive lead times force companies to manufacture only basic categories in white and black colors.

**Implications**
- Full package suppliers can take up to 5-6 months to deliver, mainly due to the lengthy customs and logistics processes, a shortage of foreign currency and low labor productivity.
- Due to limited product range, current customer base is limited to a small number of mass retailers.

Source: ETIDI, Team analysis
3. Apparel cost breakdown

Costing sheet for production and export of cotton T-shirt in Ethiopia

<table>
<thead>
<tr>
<th>Process cost and time (% of total cost of production, No. of days)</th>
<th>Total cost breakdown for export of t-shirt to the UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinning</td>
<td>Knitting</td>
</tr>
<tr>
<td>31.92%</td>
<td>7.69%</td>
</tr>
</tbody>
</table>

- **30 days is the ideal time** - production typically takes 60-75 days because most of the inputs (accessories & spare parts) have to be imported mainly from China, India and Turkey (import takes 4-5 weeks). Challenge is to bring this down to 45 days.

- **Spinning**: takes up >30% of the cost; improving capacity utilization to at least 90% is a prerequisite to improving the sector.

- **Dyeing**: resets whole process if not done right. Major bottleneck in dyeing is the lack of knowledge and skilled technicians.

- Factors affecting production time and total cost:
  - Low labor efficiency
  - Use of old fuel boilers by most factories and the increasing cost of fuel.
  - Small scale production - leads to high factory over head (FOH) cost per unit

Cost of production for basic t-shirts & shirts compares well with countries in the region

Low factor cost advantage of Ethiopia in comparison with neighboring countries is undercut by low productivity

Source: Interview, EP survey, Team analysis
3. T-shirts, men’s underwear, women’s blouses and shirts account for ~ 40% of the Ethiopian T&A exports

- Garment exports are increasingly less concentrated as products diversify – top 5 products accounted for 55% of exports in 2014 Cf. 70% in 2004.

- Women’s formal wear (suits, jackets, dresses...) is the largest product category globally (28%); at 16% it is the second largest export of Ethiopian exports

- T-shirts which account for almost 1/5th of exports constitute 11% of the global market.

Global market size of products

- Ethiopia’s exports (2014)
  - Jerseys, pullovers, cardigans...
  - Women’s blouses & shirts
  - Men’s underpants, pyjamas, bathrobes..
  - Women’s suits, jackets, dresses, skirts..
  - T-shirts

Source: ERCA, ETIDI Roadmap, Team analysis
Each segment of the value chain needs to be monitored for compliance with all pillars of sustainability

**Background**

- Ethiopia faces the challenge of increasing economic growth while at the same time reducing the carbon intensity of production and emissions of greenhouse gases as the first LDC to submit its Intended Nationally Determined Contribution (INDC) to the UNFCCC.
- Green growth/sustainability is an ambition that cannot be left to the markets alone. Good policy making (optimizing on regulatory, economic, informative and voluntary instruments) is essential for any sustainability endeavor. Targeted policies to advance environmental, social, & economic sustainability is limited. Ethiopia has policies, laws & strategies which support environmental & social sustainability. But it is starting from a low base when it comes to embracing environmental social governance (ESG) issues as part of core business. This presents with an opportunity to seek for and adopt global best.
- Concepts of RECP and company certification in ISO 9001 (to a lesser extent 14001) and WRAP certification are slowly taking hold. Complying with these standards makes economic sense for companies because access to major markets (e.g. Germany, US, EU) is conditional on it; and it presents cost saving opportunities and improved relations with communities.
- There are no dedicated institutions leading the discussion on business and sustainability in Ethiopia- save for the fledgling Ethiopian Institute of Corporate Governance. Ethiopian companies’ capacity to engage in development partnerships is weak. If we relate it to the SDGs, the T&A sector can impact on multiple SDG goals.

**Social**

- CSR is yet to be properly understood and applied. Voluntary participation in global sustainability initiatives such as the UN Global Compact, the CEO water mandate is non-existent in Ethiopia- even in comparison to peers in sub-Saharan Africa.
- Cultivation of other fibres (e.g. recycled PET to polyester fibre, jute, silk etc...) that have lesser natural resource consumption should be considered.

**Environmental**

- Ethiopia’s adaptation and emissions reduction goals under the INDC include the reduction of annual greenhouse gas emissions from 150 megatons (Mt) CO2 eq in 2010, to 145 Mt CO2 eq in 2030 (64% reduction from the current trajectory). To achieve this, existing industrial parks will have to transition to Eco-Industrial Parks (EIPs) and new parks should be developed along EIP lines.
- Natural resource consumption of the growing T&A sector needs to be closely monitored.

**Economic**

- With the current focus on FDI, there is a risk that local companies will be pushed out of the T&A sector as they are unable to cope with international competition.
- Localization through technology and skills transfer needs to be carefully engineered by the government.

Source: Team analysis
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector

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2. Global Apparel Market
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   • Global Market Trend
   • GTVAC Ecosystem
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3. Ethiopian Apparel Value Chain
   • Overview
   • Ethiopian TAVC Ecosystem
   • Ethiopian Value Chain Binding Constraints
     • Issue Areas Binding Constraints
     • Thematic Areas Binding Constraints
4. Recommendations and Road Map
   • Recommendations
     • Issue Area Recommendation
     • Thematic Area Recommendation
   • Competitive Assessment
   • Implementation Roadmap
Based on the extensive assessment, desk review and stakeholder consultations five categories of binding constraints were identified (1/2)

<table>
<thead>
<tr>
<th>Category</th>
<th>Constraint</th>
<th>Supporting Evidence</th>
</tr>
</thead>
</table>
| Banking Access to FX | • Shortage of foreign currency – low forex liquidity delays importation and expansion plans. For exporters, this shortage is driven by inability to retain export earnings  
• Low liquidity in the banking sector and high perceived risk of the T&A sector causes high interest rates and long approval times for financing  
• The domestic bank system has high LC and forex conversion costs, and is prone to delays | • Manufacturers report waiting up to 6 months to receive information on loan approval status  
• Exporters are currently allowed to retain 30% of earned forex (beyond 28 days), which is insufficient for their operations  
• Bank conversion costs range from 5% to 7%, which is substantially higher than fees charged elsewhere (e.g. 1% in China, 0.45% in Vietnam) |
| Local Workforce      | • Majority of the population is agrarian, making it difficult to source skilled workers  
• Low efficiency of available labour, reducing cost advantage; efficiency is further lowered by high turnover  
• Institutions do not provide sufficient workers – TVET graduates are not receptive to operator work  
• Current training programs do not meet the labour demand and are not effective at imparting soft skills | • Low average worker line efficiency - efficiency can go as low as 25%, compared to ~46% in Bangladesh  
• Turnover ranges from 10% upwards, some manufacturers in Bole Lemi industrial park indicate up to 70% turnover  
• Manufacturers cite that existing training initiatives do not meet even half of the demand |
| Customs and Logistics| • Import lead times are long and expensive compared to benchmark countries, lead times are affected by both customs clearance and logistics transportation  
• Customs processing is inefficient and leads to delays in customs and port handling  
• Clearance systems lacks standards; timelines for clearing imported goods are highly variable  
• Inland transportation (from factory to Djibouti port) is expensive | • Exporting from Ethiopia is 2-4 times more expensive compared to competing markets like Bangladesh  
• Manufacturers indicate that containers can take up to 17 days to arrive in Addis from Djibouti (usually a 3 day journey)  
• 10% of all goods shipped in one instance were delayed directly as a result from inefficient customs handling |

Source: ETIDI, Team analysis  
Note: For more details, refer to Annexes 7 & 8
Based on the extensive assessment, desk review and stakeholder consultations five categories of binding constraints were identified (2/2)

<table>
<thead>
<tr>
<th>Category</th>
<th>Constraint</th>
<th>Supporting Evidence</th>
</tr>
</thead>
</table>
| Industrial Park Development     | • Parks have not been planned/developed in an integrated manner that ensures symbiosis with neighbouring cities/localities, and access to social amenities for workers  
• Parks face unreliable and expensive internet, water and power (although power provision is now more consistent)  
• There is a lack of standards for driving social and environmental compliance across all parks                                                                 | • Workers in parks do not have access to housing, schools and child care, or recreational facilities etc. within reasonable distance from parks  
• Hawassa plans to employ ~30,000 workers but plans were only developed to create housing for 500 workers  
• Hawassa is the only park that has been designed to achieve high standards of environmental compliance |
| Local Capability Support        | • Although ETIDI offers technical support, there is limited tailored support & incentives to meet needs of firms that surpass the ‘typical’ domestic firm  
• There is a lack of guidelines to promote or measure degree of effective knowledge transfer  
• The sub-contract market remains relatively un-regulated  
• Garment producers import all their inputs, which fails to integrate the local industry into the export supply chain  
• Cotton sector faces lower quality and higher prices compared to imports, and low production levels  
• Ginning is hindered by outdated equipment, lack of quality control processes, and high financing needs  
• Locally produced auxiliary inputs do not meet quality standards of exporters                                                                 | • Manufacturers cite unique challenges that go beyond support that is currently offered  
• Although incentives exist to hire expat staff, manufacturers note that the 3 year period is too short and cultural differences hinder knowledge transfer  
• Existing cotton variety slows machines; causes losses of EUR 144,000 for each 100 tons of cotton  
• Despite Ethiopia having 21 ginneries & 38 vertically integrated factories that do spinning, weaving & finishing, garment producers import all inputs  
• Interviews with garment producers indicate they have tried to source auxiliary inputs locally but opted to import due to low quality |
There are also an additional three thematic areas that present opportunities for addressing the sector’s challenges

<table>
<thead>
<tr>
<th>Category</th>
<th>Constraint</th>
<th>Supporting Evidence</th>
</tr>
</thead>
</table>
| Incentives                   | • Current set of incentives don’t address fundamental operational challenges that hinder performance e.g. access to forex, customs inefficiencies etc.  
• Current incentives are not performance based and it’s effects are difficult to measure  
• Incentives are not tailored to the specific type of stakeholder | • Manufacturers and buyers cite appreciation for current incentives but indicate that these are not the key drivers that draw them to the country – they would prefer for challenges on forex, customs and logistics, and workforce to be addressed |
| Promotion                    | • Pursuit of relationships with international investors has not been active and aggressive  
• As Ethiopia is still nascent in T&A exports, it has not yet achieved quality and capability standards that set it apart from competitors | • The level of investment by buyers and manufacturers is still low – the country did not meet its T&A export targets for 2017  
• Ethiopia has not yet fully built international recognition as a go-to country for higher quality/capabilities or compliance – Ethiopia is currently known for low wages |
| Institutional Arrangements   | • T&A sector is dependent on several cross-cutting government institutions, many of which do not have a specific mandate to promote the sector’s growth  
• Although a mechanism for coordination exists across these institutions, conflicting priorities limit the ability to take specific actions  
• Use of data for effective decision-making is limited | • Key stakeholders indicate that Ethiopia lacks an empowered central agency with the ability to enforce decisions that can promote the sector’s growth  
• Manufacturers cite that information across government institutions is not readily accessible (travel to Ethiopia is necessary to have questions answered) |
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Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector
Challenges in accessing forex and finance continue to persist despite existing efforts to prioritize the T&A sector

Context
- There is a structural forex shortage in Ethiopia, which has negatively affected textiles and apparel investors, particularly those who are not relying on CMT.
- Recent government interventions have sought to address the forex availability challenge in various ways:
  - Under a national directive that came into effect in early 2016, the National Bank of Ethiopia instructed commercial banks to prioritize certain sectors for forex allocation, including the textiles and apparel sector.
  - In Oct. 2017, a new directive increased exporters’ forex retention from 10% to 30%.
  - In Oct. 2017, the new directive allowed use of supplier credit for all exporters.
- In spite of these efforts, access to forex remains the main banking challenge facing investors; long-term solutions will need to address the forex availability/retention issue.
- Input suppliers outside of parks are especially disadvantaged – unlike those in IPs, they are paid in local currency and therefore have to depend on LCs, which can take >3 months.
- In addition to the challenge of forex, both foreign and local firms face challenges in accessing financing, driven by liquidity shortages. Local manufacturers, in particular, struggle to access investment and trade financing.

Binding Constraints
Financing related constraints
2c Local banks have difficulty meeting trade finance needs of foreign companies due to low integration with global banking systems.

2d Local T&A firms face low access to finance due to low liquidity in the banking sector. They also face high perceived risk, resulting in high interest rates and long loan approval durations.
  - High interest rates – gov. banks provide lower rates (nominal interest rates of 9% - 11.5%) but private banks charge rates as high as 18%.
  - Long loan approval durations – local manufacturers wait up to 6 months or longer for loan approvals from state banks, largely due to the lengthy due diligence processes.

Forex related constraints
2a Limited retention of earned forex – Firms can only retain 30% of earned forex (remaining 70% is converted to local currency after 28 days).
2b Transactions in forex are limited to IP-based manufacturers – input suppliers outside of IPs are disincentivized from supplying exporters as they are unable to transact in forex.

Note: Despite binding constraints related to access to forex continuing to persist, this report will focus primarily on finance-related issues.
Ethiopia’s young workforce offers high potential for the sector; however specific workforce development challenges need addressing

**Context**
- Ethiopia is emerging as an attractive location for textile and apparel manufacturers as it offers low wages and an abundant, young and trainable labour force.
- Ethiopia has a wide network of Technical Vocational Education and Training (TVET) centers (>1300; 20% of which specialize in the T&A sector), and six universities that provide professional education in the textiles industry.
- However, the sector is currently facing a structural challenge – majority of the population is agrarian and not accustomed to factory work; Only 5% employment is in manufacturing while 80% is in agriculture.
- Largely as a result of the historic agrarian focus, the sector faces challenges of high turnover, absenteeism, and low efficiency and productivity.
- The GoE (through MOI/ETIDI), development partners and the private sector have undertaken efforts to address these challenges through various training initiatives.
- Despite these initiatives, factories continue to cite workforce challenges as one of the major impediments to production.

**Binding Constraints**
- TVETs do not provide enough workers into factories, despite being an institution that is expected to meet the industry demand for workers. In addition, there is a mismatch between university design and T&A sector demands.
- The availability of workers in the required quantity and quality is below the industry demand - Factories have difficulty sourcing skilled workers as most of the workforce is only beginning to shift from a traditional agrarian society to industrial work.
- There is inconsistency in efficiency rates - one international factory indicates reaching efficiency levels similar to Bangladesh (47-48%) while others experience rates as low as 25%. Low efficiency rates can partially be attributed to high turnover rates.
- Turnover is high – it can range from 10% to as high as 70% a year for various factories.
- High turnover is partly due to low wages. Employers cite the main cause of worker loss to other factories as a slight increase in wages.

**Maps to the recommendation that addresses each challenge**

**Note:** [1] Addressed under section on industrial parks.
Several actors have launched initiatives to mitigate workforce challenges, but these do not address the issues at a national scale.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Achievement to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving Industrial Relations for Decent Work &amp; Sustainable Development</td>
<td>3 year, USD 3M project funded by SIDA and H&amp;M and implemented by ILO, launched in early 2016</td>
<td>Assists government, social partners, and industry stakeholders to increase productivity, social dialogue, and improve wages and working conditions at a national, regional, and factory level</td>
</tr>
<tr>
<td>Hawassa Industrial Park Sourcing, Training &amp; Recruitment Program (HIPSTER)</td>
<td>An public-private partnership program launched by Enterprise Partners (EP) in 2016 to facilitate worker sourcing, training and recruitment for Hawassa IP in collaboration with ETIDI, the Regional Bureau of Industry, Investors’ Association, private trainers, and the park enterprises</td>
<td>It provides outreach, screening, testing and grading and aims to provide soft skills training to a total of 30,000 potential workers over two years. It includes a worker database for Hawassa, owned by EIC, that helps track workers coming into the park</td>
</tr>
<tr>
<td>Capacity Devt. in Higher Education and TVET Reform</td>
<td>Six-week GIZ modular training program to be implemented by TVET institutions in partnership with the private sector (launched in 2016)</td>
<td>Enhancing capacity of TVETs to deliver training</td>
</tr>
<tr>
<td>labour Market-Oriented Education &amp; Training Program</td>
<td>GIZ program seeking to increase practical relevance of university programs by creating links between businesses &amp; universities</td>
<td>Enhancing skills and competence of graduates to make them work-ready by the time they complete training</td>
</tr>
<tr>
<td>ILO initiative on labour laws</td>
<td>ILO has engaged a consultant to help develop a pathway to minimum wage development</td>
<td>The work is currently underway</td>
</tr>
</tbody>
</table>
| ETIDI led initiatives (ongoing)                                           | • Conducting a study to open an ETIDI branch office and establish training centers in the industrial parks  
• Establishing industry-university linkages in Drie dawa, Adama, Hawasa, Mekele, Kombolcha and Bahir Dar  
• Working closely with TVETs to assess and identify the gap in terms of curricula, the available workshops and lab facilities, reference books, capacity of trainers etc. and reform them towards industry requirements  
• Assessing the workforce gap already working in the industry and providing short term training as per the gaps  
• Providing soft skills training to workers before joining the industry to develop better working culture |                                                                                                                                                                                                                                                                                                       |
| Worker retention and welfare initiatives by EP (ongoing)                  | • Supporting migrant women in dealing with gender violence and sexual/reproductive health issues  
• Savings matching initiative where workers save 10% of their salary, and employers match workers savings  
• Supporting post industry career path development for factory workers  
• Improving worker voice, communication, representation and responsibility |                                                                                                                                                                                                                                                                                                       |
The textiles and apparel industry is particularly sensitive to customs & logistics competitiveness; Ethiopia needs to improve both lead times and cost

Context
- The lack of an integrated local supply chain in Ethiopia causes an over-reliance on imported inputs; currently, almost all of the production inputs for the Ethiopian textile & apparel sector are imported
- The export production cycle is subject to tight delivery schedules with ever shortening lead times; this places a premium on time and reliability even when goods are imported
- Given the importance of lead time, customs clearance is identified by stakeholders as one of the most important aspects of successfully doing business in Ethiopia
- However, high local inland transportation costs, ineffective customs and port handling as well as documentary compliance costs makes the customs and logistics services uncompetitive with regards to cost and lead time
- The Ethiopian Revenues and Customs Authority (MoR) is implementing various initiatives to help solve key constraints such as the introduction of e-single window and a customs management system
- Nevertheless, there are a series of underlying constraints that need to be addressed to unleash growth in the T&A sector

Binding Constraints
- A national logistics strategy has been developed, however, there are no national targets for competitiveness or a roadmap to meet targets
- Import costs are comparatively high (importing to Ethiopia is more than 5 times the cost of importing to Bangladesh) due to inefficient customs and double handling
- Customs clearance is slow, and lacks efficiency and standards; 77% of the time required to trade across borders is needed for document preparation, customs clearance, and inspections
- Logistics system is slow; import cycle time from discharge to delivery at factory typically takes 10-15 days; export cycle time from factory to loading is 8-10 days
- There are no companies offering warehousing services around the industrial parks
- There is no system to manage in-going and out-going empty containers in industrial parks (currently there is a 1 to 5 imbalance)
There are several initiatives underway to address customs and logistics challenges, with some initiatives specific to the T&A sector.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Achievement to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1c Customs Management System</strong></td>
<td>MoR is implementing an updated electronic customs management system, migrating from the older system, to simplify the customs procedures, facilitate trade and ensure that all goods are declared with the correct calculation.</td>
<td></td>
</tr>
<tr>
<td><strong>1d E-Single Window</strong></td>
<td>MoR is working towards establishing an electronic single-window service delivery for international trade at the Ethio-Kenya, and Ethio-Djibouti borders.</td>
<td></td>
</tr>
<tr>
<td><strong>1e Post Clearance Audit Manual</strong></td>
<td>World Customs Organization (WCO) is supporting MoR in enhancing its Post Clearance Audit (PCA) Manual.</td>
<td>System is anticipated to be piloted around mid-2018</td>
</tr>
<tr>
<td><strong>1f ET-Djibouti Transit Agreement</strong></td>
<td>Agreement to utilize common clearance procedures for both Djibouti and Addis Ababa is developed.</td>
<td>Agreement has been signed and implementation is underway</td>
</tr>
<tr>
<td><strong>1g National Logistics Strategy</strong></td>
<td>UNDP, the Ministry of Transport, and the Ethiopian Maritime Affairs Authority (EMAA) are developing a diagnostic study, logistics interventions, blueprint, and an implementation strategy for the logistics sector.</td>
<td>National Logistics Strategy is expected to improve Ethiopia’s maritime, air and road connectivity and will be implemented over five years</td>
</tr>
</tbody>
</table>

These ongoing initiatives address part of the challenges, but there are additional underlying challenges that need addressing.

*Source: Stakeholder Interviews; World Customs Organization (WCO)*
Ethiopia’s high transport costs are structural (land-locked), but low competition in the sector and costly bureaucratic steps add to the challenges

**Logistics**
- **Road transport** – As a result of a lack of competitive pressures in the logistics sector, the road transport from Hawassa to Modjo is extremely costly. Currently, firms are required to pay for the return to Hawassa as well, as containers are returned empty. In addition, no consolidation of containers is currently possible.
- **Rail transport** – Based on current estimates, the rail transport will not lead to a cost reduction in transport (see Appendix III for a comparison).

**Customs**
- **Wide range of requirements** – A long list of declarations, stamps and other charges are required for exports.
- **Overlap Djibouti and Ethiopian customs** – Both custom authorities have not aligned their requirements, requiring multiple duplicate steps.

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**Source:** ESLSE, EDRC, DP World, PVH, stakeholder interviews

**Note:** [1] This includes documentation and customs clearing, MTS’s service charge, port dues, revenue stamp, Djibouti customs declaration, ISPS and gate pass.
Future IP development should answer a series of considerations around planning and design

Context
- With the vision to make Ethiopia a leading manufacturing hub in Africa by 2025, the GOE has been focusing on industrial park development and expansion across sectors including for textiles and apparel similar to what was done in China.
- Ethiopia has so far completed seven public sector-built, six specialized parks for textile and apparel (Bole Lemi, Hawassa, Mekelle, Kombolcha, Adama and Debre Birhan); an additional nine government owned parks are under construction or in planning.
- Bole Lemi and Hawassa were the first constructed industrial parks and in many ways were considered pilots, through which emerging lessons could be applied to the other parks being developed.
- Industrial parks, faced many design challenges, for example there are frequent power and water interruptions, and all the sheds are a standard size which does not accommodate the needs of input producers who need a smaller space.
- While there are plans for how to address many of the challenges for existing IPs, questions around integrated planning, specialization, and design remain.

Considerations and Questions
- Overall, Ethiopia has a relatively strong position in environmental compliance; it has taken some positive steps such as implementation of the Zero Liquid Discharge in Hawassa, but there are some key questions around how Ethiopia can fully capitalize on building its brand around environmental compliance, which is increasingly becoming important for buyers.
- Plans for industrial parks and local economic development have not been coordinated across agencies.
- With a series of industrial parks (both specialized and multi-use) being developed across the country, questions around industry specialization and cluster development emerge.

Maps to the recommendation that addresses each challenge

Export facilitation - Industrial Parks are being developed to facilitate export by providing dedicated infrastructure and simplifying procedures

- Industrial Parks Development Corporation established in 2014 to lead the drive for industrialization through establishment & operation of eco-industrial parks

- Government is developing Industrial Parks to boost manufacturing in key sectors including T&A

- The 5 (HIP, MIP, KIP, BLIP, AIP) specialized IPs exported Mn USD 100.6. HIP and BLIP exported 97% of the total.

- One-stop-service in IPs house customs, logistics, immigration, banking, utilities, city administration, security, labor & sector support services for quick & easy access by IP enterprises

Source: EIC
Limited capacity of the local supply chain is the underlying barrier to long term integration...

Context
- The country’s textile and apparel industry is a key sector for the achievement of middle-income status by 2025, one of the target’s outlined in the country’s industrialization plans.
- To incorporate local players into the growth of the industry, various government entities have developed strategies to support development of upstream actors in the sector.
- For example, the National Cotton Development Strategy (NCDS) was launched and adopted in 2017; and is expected to boost production and productivity of the cotton industry; the SME Development Plan also identifies clusters for incorporation into the export value chain through backward linkages.
- In spite of these strategies, local actors in cotton, ginning, and textiles are minimally integrated into the country’s global-supply-chain-oriented plans; the local supply chain continues to largely serve the domestic market.
- Apparel producers and buyers cite quality differences between local production and exporter requirements as the underlying reason for continued importation of inputs.

Binding Constraints
1. Low quality of local products drives importation of auxiliary inputs e.g. cartons, carton boxes, zippers etc. by apparel manufacturers.
2. The ginning sector produces low quality outputs and experiences low productivity due to old and outdated equipment, low financial capability to invest in new equipment, lack of quality standards and processes, and underutilization of existing facilities, driven by low cotton supply and declining production.
3. Like ginning, the local textiles industry is largely unable to meet export quality.
4. There is low quality and availability of locally produced cotton - local cotton is also 10% more expensive than imports because of low quality impacting processing.

Source: ETIDI Textile and apparel Technology Roadmap
In addition, challenges in sub-contracting and knowledge transfer continue to persist for domestic firms

Context
- Given that the industry is nascent Ethiopia’s industry is primarily dominated by local firms, but the number of domestic firms in the country is still low (less than 100)
- Most domestic firms are engaged in garment production, focusing primarily on the local market where they have greater flexibility when it comes quality standards and the ability to set the price
- Currently, less than 20% of domestic enterprises are involved in exporting, and export volumes by local enterprises are highly variable
- Although most firms have some degree of interest in engaging in exports they face many challenges around accessing finance, forex, and meeting buyers quality standards
- The Ethiopian Textile Industry Development Institute (ETIDI) was developed to support manufacturers and has been working with local manufacturers to help them meet export criteria and standards
- Nevertheless, a series of binding constraints remain that prevent domestic firms from being able to fully engage in increased exports

Binding Constraints
- Some domestic manufacturers show potential and interest in expanding to the export market but have little tailored support and incentive to meet their needs which surpasses the ‘typical’ domestic firm
- Although there are measures in place to promote and encourage expatriate hires (e.g. facilitation of a 2 year work permit and income tax exemptions), there are no guidelines to promote or measure degree of effective knowledge transfer
- Furthermore, the current eco-system does not have any incentives or controls in place to regulate the sub-contract market; restrictions imposed on the movement of duty free imported inputs outside the industrial parks further impedes the ability of firms to engage in sub-contracting

Source: Stakeholder Interviews
GoE, development partners and investors are leading various initiatives to create backward linkages in the sector

| Initiative                                                                 | Description                                                                                                                                                                                                                                                                                                                                 | Achievement to date                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **Ethiopian Industrial Inputs Development Enterprise (EIIDE)**             | Established under the Ministry of Industry in 2014 to ensure supply of industrial inputs and support enterprises engaged in production & supply of inputs                                                                                                                                                                                                 | Purchases cotton from domestic ginneries as well as imports when there is low supply, and distribute to textile mills to mitigate shortages                                                                                                  |
| **Bonded factory input supply**                                           | International input (chemicals and dyestuff) manufacturers have been allowed to bring their products in the country through the bonded warehouse system (tax free) and to sell to the industry                                                                                                                                                                                                                             | The system is working for chemicals and dyestuffs; direction has been given by government to apply the same approach to fabric, trims and accessories                                                                                       |
| **Ginning sector Rating study**                                           | ETIDI has conducted a study to rate ginneries per international best practice parameters. Based on findings, ETIDI has been proposed different policy recommendation to upgrade ginneries                                                                                                                                                                                                                   | The policy recommendation has been submitted for review and approval                                                                                                                                                                        |
| **Competitiveness and Job Creation (CJC) Project**                       | B2B Fund through the Competitiveness and Job Creation (CJC) Project: CJC is a $270 million World Bank project launched in 2014 with the aim of creating jobs working with IPDC. The fund was created to address the constraints that hinder local enterprises from being suppliers or sub-contractors to bigger firms within IPs                                                                                                                                 | As of October 2019, 15 out of the 25 targeted local suppliers were working with firms located within the supported Industrial Parks (IPs) and 5472 jobs out of the 46,000 expected to be created by 2021 had been created through activities linked to the supported IPs |
| **Improved Cotton Seeds Intervention**                                    | Promoting Access to Improved Cotton Seeds (ICS) and Sustainable Cotton Farming: Enterprise Partners (EP) started implementing this sustainable cotton farming intervention in 2014. EP has been working with Metema FCU, Selam Union FCU, and Tiret Ginnery. Aims to increase access to ICS and to introduce a business model that improves the management of seed processing through a farmers’ cooperative union and a commercial ginnery                                                                 |                                                                                                                                                                                                                                           |
| **National Cotton Development Strategy (NCDS)**                          | The NCDS which outlines a comprehensive road map for cotton development activities in Ethiopia between 2017-2032 aims to increase production, quality, transparency in pricing, and environmental and social sustainability in the cotton supply chain. The GoE aims to make Ethiopia one of the world’s top cotton producers                                                                                          | In October 2017, the National Cotton Development Strategy was validated. In 2018, the country produced 33,842 metric tons of cotton. Over the next years, the production is planned to increase to 200,000 to 350,000 metric tons                                                                 |
| **Commercial & Contract Farming Program**                                 | A PPP project in which Enterprise Partners made linkages between H&M, a textile mill and cotton farmers                                                                                                                                                                                                                                                                                    | The program is working to ensure sufficient high quality cotton is available for H&M production                                                                                                                                            |

Several initiatives aim to support the domestic industry and address some of the key challenges

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Achievement to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expatriate training</td>
<td>Implementing a cost-sharing initiative for expatriate training costs: 85% loan 1st year, and up to 75% for 2nd year, 50% 3rd year, 25% 4th year, 0% 5th year</td>
<td>Agreement has been signed and approved by the Investment Board</td>
</tr>
<tr>
<td>Extension of the expatriate tax exemption period</td>
<td>Revisions are being made by MoI and ETIDI to the existing directive to extend expatriate income tax free period to 5 years (up from 2 years)</td>
<td>Since 2017, expatriate employees of sourcing companies located in industrial parks benefit from up to 5 years personal income tax (PIT) exemption</td>
</tr>
<tr>
<td>Cost-sharing for ERP system</td>
<td>Implementing a 80-20% cost-sharing arrangement to help with implementation of ERP systems</td>
<td>Initiative was piloted in one firm over 3 years ago and now a proposal has been developed and approved to expand the benefit to other firms</td>
</tr>
<tr>
<td>Capacity building programs</td>
<td>Implementing capacity building programs (ETIDI in collaboration with development partners) to support firm to overcome challenges with technical and managerial gaps</td>
<td>More than 15 domestic firms are receiving capacity building support</td>
</tr>
<tr>
<td>International trade fairs</td>
<td>Cost-sharing arrangements to facilitate attendance in international trade fairs; on average 30% is covered by the firm and 70% is covered by the development partner/ gov.</td>
<td>Currently in progress, domestic firms are aware of its existence and most who are interested in exports utilize the benefits</td>
</tr>
<tr>
<td>Second schedule scheme</td>
<td>Directive allowing small and medium firms to import raw materials free of tax for a 3 year period from the date of the firm’s establishment regardless of whether the products are for export or for local consumption</td>
<td>Implemented in 2017 and more than 10 small and medium firms have taken advantage of the benefits to date</td>
</tr>
</tbody>
</table>

Source: Ethiopian Investment Commission
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### Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector
Incentives are one of the key policy instruments the GoE uses to attract FDI and drive growth in the textiles and apparel sector

**Context**
- As part of Ethiopia’s **over-arching strategy to attract FDI**, Ethiopia offers a number of incentives (both fiscal and non-fiscal) for industrial park tenants
- These incentives are the result of a **joint effort between the Ethiopia Investment Commission (EIC) and Development Bank of Ethiopia (DBE)**
- **Examples of incentives include** access to land and loans at concessionary rates; income tax exemption for up to 10 – 15 years; access to duty-free imports of capital goods, construction materials, and vehicles; on-site custom clearance facilities; an exemption on paying income tax for two to four years for foreign staff to support knowledge transfer and exchange of expertise; and a one-stop shop for regulatory clearances
- Although most of the **incentives are similar to what other countries offer**, literature on incentives shows that fiscal incentives do little to embed investors in the domestic economy and even less to convince them to re-invest
- Because the **current incentives regime is not tied to specific targets**, its impact in achieving policy targets is unclear

**Binding Constraints**
- The current incentives regime is un-targeted and its effects cannot be measured
- Although incentives are meant to achieve a set of policy objectives, **these objectives are broad and difficult to tie to specific policy targets for incentives**
- Measuring whether the incentives achieve national objectives is **difficult**, the effectiveness of incentives can only be justified or challenged based on qualitative assessments or linked to development data from which confounding variables cannot be isolated
- Incentives are **not tied to specific operational challenges faced by investors or to degree of performance relative to national targets**.

**Source**: Stakeholder Interviews; IISD, Rethinking Investment Incentives
Ethiopia currently offers various fiscal and non-fiscal incentives to attract foreign direct investment (FDI) and to encourage local industry dev't

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Incentives</td>
<td>Customs</td>
<td>• Allowance to import capital goods duty free indefinitely for an investor granted with customs duty exemption</td>
</tr>
</tbody>
</table>
| | Income Tax | • Income tax exemptions for 2-5 years (Addis Ababa and surrounding), or 3-6 (other areas)  
| | | • Income tax deduction of 30% for three consecutive years after the expiry of the income tax exemption period for investors who set up in specified areas (e.g. Gambella, Afar etc.)  
| | | • Income tax deduction of 30% for three consecutive years after the expiry of the income tax exemption period for investors who upgrade their plants by at least 50% of capacity  
| | | • Income tax exemption for an additional 2 years for investors who export at least 60% of their products or services, or supply these to an exporter  
| | | • Income tax holidays are granted based on export performance |
| | Export Promotion | • No export tax is levied on Ethiopian export products  
| | | • Exemption from the payment of customs duties and other taxes levied on imported and locally purchased raw materials used in the production of export goods |
| | Loss Carry Forward | • Ability to carry forward such losses, following the expiration of the income tax exemption period, for half of the tax exemption period for businesses that suffer losses during the income tax exemption period |
| | Human Resources | • International human resources are exempted from income tax if their stay is under two years |
| | Financing | • Ability to retain and deposit in a bank account up to 20% of their foreign exchange earnings for future use in the operation of their enterprises and no export price control is imposed  
| | | • Franco valuta import of raw materials for enterprises engaged in export processing  
| | | • Export credit guarantee scheme which ensures an exporter receives payment for goods shipped overseas in the event the customer defaults  
| | | • (i) financing through loans of up to 70% of capital requirements for new establishments; (ii) loans that charge 8.5% interest with five-year grace periods; and (iii) the operation of an Export Guarantee Scheme, which charges 1% interest without collateral requirements for working capital |
| | Capital Remittances | • Ability for foreign investors to make a specified set of remittances out of Ethiopia in convertible foreign currency |

Source: EIC, Incentives Package
However, the current incentives regime is un-targeted and international experience shows limited effect of these types of incentives

Current actions

Incentive objectives are not clear
• The existing policy objectives of incentive proclamations issued by the government are listed as:
  • Attracting investment in priority sectors
  • Developing lagging regions
  • Promoting exports and reducing import dependence
  • Promoting domestic value addition and local sourcing
  • Creating jobs for locals

Incentives are not linked to specific policy targets
• The incentives offered by the government are not specifically linked to policy targets, although they are judged in relation to overall contribution of the regime to Growth and Transformation Plan objectives

There is no monitoring of impact or costs
• There currently is no systematic monitoring and evaluation mechanism to track the performance of firms benefiting from incentives against policy objectives
• Tax exemptions are not included in government expenditures for public budget preparation

Source: Stakeholder Interviews

Binding Constraints

Policy objectives cannot be isolated
• The policy objectives associated with public investment incentives are complex, at times conflicting, and difficult to tie to specific policy targets for incentives
• Policy objectives are broad and can be used to justify a variety of incentives
• The incentives regime can only be evaluated and justified or challenged as a whole along a spectrum of development criteria

Incentives are not measurable and cannot be evaluated
• The effectiveness of incentives can only be justified or challenged based on qualitative assessments or linked to development data from which confounding variables cannot be isolated

There is no data collection system to monitor impact or cost.
• There is no existing culture of evidence-based cost-benefit evaluation of the effectiveness of current incentives
• Certain capacities for data collection will need to be developed in order to transition to an evidence-based approach

Source: Stakeholder Interviews
Ethiopia should take a more active stance in pursuing relationships with investors as it continues to develop its national brand

Context
- Several factors make Ethiopia an attractive destination for buyers and international apparel manufacturers
  - Geographic proximity to Europe and Asia - this allows fabrics and imports to be shipped with speed. This is increasingly important as lead times are becoming more important in the industry
  - Market access to large markets – Ethiopia enjoys duty-free access to the European Union (EU) through the Everything but Arms agreement, and also sells apparel to the United States (US) duty free through the African Growth and Opportunities Act (AGOA)

- In addition to this, Ethiopia has made efforts to attract investment in apparel production, most notably through tax incentives development of modern industrial parks (IPs) tailored to the needs of the apparel industry

- Despite this, Ethiopia has not been able to meet its textiles and export targets in recent years. In 2016, the sector’s exports were USD 89 million, only a third of the planned USD 271 million

- As the textiles and apparel sector is a central pillar in Ethiopia’s industrialization strategy, increased efforts towards investment promotion are needed to unlock the sector’s economic contribution

Binding Constraints
- As Ethiopia is still nascent in T&A exports, it has not yet achieved quality and capability standards that set it apart from competitors

- Ethiopia has been able to attract some large buyers e.g. PVH, but the level of investment by buyers and manufacturers is still low – the country did not meet its T&A export targets for 2017 and needs to secure market to achieve its industrialization targets

- Industry experts indicate that pursuit of relationships with international investors has not been active and aggressive, limiting progress in attracting investment

Considerations and Questions
- **Product and capabilities** – what products and value added capabilities would the country like to build its brand on?

- **Geographic focus** – are there particular geographies that should be prioritized for investment promotion?

- **Promotion activities** – what specific actions do government actors need to take to increase the country’s visibility to investors?
Core actors operating in the T&A sector deal with a complex web of institutions at different segments in the chain

<table>
<thead>
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<th>Core Actors</th>
<th>Min. Ag.</th>
<th>Land Admin Office</th>
<th>Ethiopia Seeds Enmp</th>
<th>MOT/IDO</th>
<th>MOC/Trade</th>
<th>Min. Env’t</th>
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<th>Eth. Standards</th>
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**Source:** Innovision report, Team analysis

**Major Issues**

- Supply of inputs for cotton production (seeds, fertilizers…)
- Quality control
- Market linkage
- Environmental compliance

- Finance for importing cotton
- Quality control
- Market linkage
- Environmental compliance
- Securing necessary licenses

- Access to finance
- Access to land & provision of utilities
- Licensing: processing import/export
- Logistics & customs
- Quality control
- Market linkage
- Environmental compliance
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector

Contents

1. Executive Summary
2. Global Apparel Market
   • Overview
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3. Ethiopian Apparel Value Chain
   • Overview
   • Ethiopian TAVC Ecosystem
   • Ethiopian Value Chain Binding Constraints
     • Issue Areas Binding Constraints
     • Thematic Areas Binding Constraints
4. Recommendations and Road Map
   • Recommendations
     • Issue Area Recommendation
     • Thematic Area Recommendation
     • Competitive Assessment
     • Implementation Roadmap
The remainder of this document elaborates on preliminary recommendations that have the potential to overcome the sector’s constraints.

Each high level recommendation is presented using a three category structure:

1. **Constraints**
   - Overview of the underlying challenges which are hindering the sector’s growth and will be addressed by the recommended actions.

2. **Recommendations**
   - Details of the recommendations or ‘what should be done’ to address the constraints.

3. **Benchmarks informing recommendations**
   - Supporting evidence from countries around the world which have dealt with similar challenges.

- **Recommendation: Create university-industry linkages and reform TVET system to meet the specific needs of the textiles and apparel sector**

  **Constraints**
  - University-industry linkage is lacking: current sector specific university programs do not train students with relevant skills that are required for mid-level management positions in the industry (e.g., garment manufacturers report having to entirely retain prospective employees from the current university system).
  - TVETs do not provide enough workers into factories. The main reason for this is a mismatch between TVET design and existing T&A sector demands (i.e. curriculum design and sourcing).

  **Recommendations**
  - Redesign university programs in close cooperation with firms in order to ensure the (managerial) needs of industry are met.
  - Return the TVET system to meet demands of T&A sector:
    - Revise the curriculum and provide shorter courses
    - Incorporate work-integrated learning that links students with factories through an apprenticeship program
    - Incorporate industrial culture awareness program in curriculum to set expectations for factory work
    - Work admissions process to target students that do not qualify for TVET education (i.e. those with grade 5-10 education)

  **Benchmarks Informing Recommendations**
  - The Universiti Tun Hussein Onn Malaysia (UTHM) has a work based learning programme that aims to revitalize the TVET Teachers Training Systems in Malaysia through a PPP model, involving the private sector, public universities and the government. In cooperation with industry a new, integrated occupational technical and academic curriculum has been developed, which contains elements of coordinated classroom and workplace learning. The programme consists of 6 semesters in the institution and 2 semesters in the industry. For Ethiopia’s textiles and apparel sector – this would be much shorter given different requirements.
  - In Thailand, a similar participatory teaching programme focused on work-integrated learning has been developed. This model uses a “Tri-lateral Network Interaction Model” between university, business and government. Both programmes are part of a research cooperation project between GIZ and OECD.
  - In Korea, the Work-based Learning System is where in-company trainers train workers in a company instead of in a school or vocational training institute and provide certifications issued by government and the industry. Companies are provided incentives to facilitate
Recommendation: Allow companies within IPs to trade foreign currencies between themselves in a swap system

Constraints

- While firms within IPs have access to certain schemes to address the challenges they face as a result of a lack of foreign exchange (e.g. bonded warehouse), these initiatives do not suffice and firms still face challenges accessing foreign currency.

- In order to have manufacturers move from CMT to FOB, an increasing amount of forex needs to be available. Moving to FOB is of paramount importance for increasing net export earnings and building backward linkages.

Recommendations

- Allow companies within IPs to trade foreign currencies between themselves in a swap system - This currency swap scheme would allow export oriented enterprises to directly trade their hard currency within and across IPs. An automated system, operated by commercial banks and regulated by the NBE, would match forex purchasing and forex selling enterprises ensuring efficient allocation of forex among prioritized industries. Commercial banks, in addition to creating the market, would oversee compliance with NBE directives and the documentary requirements ensuring that forex obtained via the market is solely used for importing inputs. The scheme can be rolled out in a controlled manner on a park by park basis.

Benchmarks Informing Recommendations

China – Established regional forex swap markets for foreign funded enterprises in 1986. In 1988 a formal foreign exchange retention system was introduced, extending forex swap markets to domestic enterprises and local governments. The 1986 policy led to a significant increase in forex trading volumes between companies, with an average of 44% annual growth in forex trades between 1987 and 1992. Forex transactions took place in dedicated SEZ-based swap centers, called Foreign Exchange Adjustment Centers, at rates agreed between buyers and sellers subject to local State Administration of Foreign Exchange approval. The policy was eventually extended to over 100 coastal cities, most of whom established swap centers by 1988.

Source: Dalberg, “Memo: Options to improve access to foreign exchange for agro-processing in Ethiopia”
Recommendation: Extend forex transactions privileges to input providers outside IPs

Constraints

• For input providers outside of parks, financing challenges are compounded by difficulty accessing forex – despite importing their inputs and supplying to exporters in parks, their transactions do not occur in forex, limiting availability of forex

Recommendations

20. Extend forex transaction privileges to indirect exporters outside the IPs – allow input producers supplying manufacturers in IPs to be paid in forex and access duty free imports, to incentivize deeper backward linkages. Risks of using forex revenue and duty free imports to support local sales can be mitigated by:

• Use input/output coefficients to calculate the value of imports input manufacturers are allowed to bring in duty free (to prevent using duty free imports for sale in the local market, and incentivize production for export)

• Collect annual data on the value of goods input manufacturers sell locally versus what they export indirectly, to determine the extent to which they are allowed to be paid in forex each year (sliding scale mechanism)

Benchmarks Informing Recommendations

China – has used industrial parks to test changes in the banking regime which were then expanded nationally e.g. it opened the banking sector to foreign banks in special economic zones (SEZs) first, and from 1986 to 1994, allowed inter-company trading of foreign currency in SEZs in dedicated swap centres.

Source: IMF, “Exchange Rate Arrangements and Currency Convertibility: Developments and Issues”, 1999; Myanmar Times, “Central Bank allows foreign banks to provide export financing”, 2018; stakeholder interviews; Dalberg analysis
**Recommendation:** Facilitate access to (trade) finance for exporting manufacturers through increased supplier credit and dedicated financing facilities

### Constraints

- **Constrained supplier credit reduces export opportunities**
  - Currently, the maximum supplier credit is limited to the total of last year’s exports of a firm. This limits the potential for a firm to grow its exports.

- **Low liquidity of the banking sector** – while low liquidity has a broader impact beyond the T&A sector, it is the main challenge behind limited access to finance.
  - The challenge of low liquidity is compounded by high perceived risk of the T&A firms by banks, resulting in high interest rates and long loan approval durations.
  - High interest rates – interest rates of 9% - 11.5% from state banks and up to 18% from private banks, depending on amount of export revenue.
  - Long loan approval durations – waiting periods of up to 6 months or longer for loan approvals from state banks; private banks are faster but charge higher interest rates.
  - As a result, firms have to choose between delaying capital investments or financing costlier loans; many opt for the latter and use their own capital to finance growth.

- **Access to finance constrains growth of the T&A sector**
  - Nearly 50% of all firms in Ethiopia were estimated to be fully lacking any form of external financing.
  - Economy-wide, credit constrained firms average 15% lower sales growth, 5% lower employment growth, and 11% lower productivity growth than their peers.

### Recommendations

2a. Increase the limit of supplier credit for exporting companies from 500,000 USD to 1,000,000 USD

2b. Provide dedicated financing facilities for T&A manufacturers using offtake agreements with investors as collateral.
  - Dedicated financing facilities would ensure the T&A sector is prioritized for financing in practice.
  - Having offtake agreements ensures that manufacturers have market and can therefore repay their loans.
  - Financing facilities can be provided in the form of special purpose vehicles through local banks, with bilaterals / multilaterals and development partners (e.g., the World Bank, IFC, AfDB, USAID etc.) providing financing to the banks to lend to firms, or being more directly involved in the loan management process.
  - Both the availability of capital and high interest rates can be addressed through provision of lower interest rates by special purpose funds.
  - As development partners view themselves as having a market development / capacity building role, they are unlikely to provide dedicated financing facilities as long term solutions. Additionally, they may require commitments by government to open up the financial sector in an attempt to provide more long term, sustainable solutions. Consequently, long term plans for increasing access to finance will need to be anchored on increasing liquidity in the banking sector.

### Benchmarks Informing Recommendations

- **South Korea – SME Banking Ecosystem:** Small and medium Business Corporation (SBC), a state-owned development bank, provides long-term low-interest loans specifically to SMEs. SBC bank loans include both direct loans and proxy loans – whereby SBC provides preliminary loan examination but a partner bank carries out the loan management function. South Korea also has several institutions operating a vast credit guarantee support system for SMEs to obtain credit from private banks, with institutions providing sector or region-specific credit guarantees. Korea also provides on-lending through policy banks for SME finance, and instituted SME lending quotas for banks in 1965.

- **IFC – the Global Trade Supplier Finance (GTSF) program:** makes working capital available to suppliers with purchasing arrangements with international buyers. GTSF helps lower costs associated with financing suppliers by purchasing receivables on invoices.

- **World Bank – SME Finance Project launched in 2016 in Ethiopia:** It is an 8-year, USD 200 million project to increase SME’s access to finance, especially working capital. While focused on SMEs, the project does not necessarily target T&A SMEs.
Recommendation: Create university-industry linkages and reform TVET system to meet the specific needs of the textiles and apparel sector

**Constraints**

- **University-industry linkage is lacking**: current sector specific university programs do not train students with relevant skills that are required for (mid-level) management positions in the industry (e.g., garment manufacturers report having to entirely retrain prospective employees from the current university system).

- **TVETs do not provide enough workers into factories**: The main reason for this is a mismatch between TVET design and existing T&A sector demands (i.e. curriculum design and sourcing).

**Recommendations**

- **Redesign university programs in close cooperation with firms in order to ensure the (managerial) needs of industry are met.**

- **Reform the TVET system to meet demands of T&A sector:**
  - Revise the curriculum and provide shorter courses
  - Incorporate work-integrated learning that links students with factories through an apprenticeship program
  - Incorporate industrial culture awareness program in curriculum to set expectations for factory work
  - Rework admissions process to target students that do not qualify for TVET education (i.e. those with grade 5-10 education)

**Benchmarks Informing Recommendations**

- The Universiti Tun Hussein Onn Malaysia (UTHM) has a work based learning programme that aims to revitalise the TVET Teachers Training Systems in Malaysia through a PPP model, involving the private sector, public universities and the government. In cooperation with industry a new, integrated occupational-technical and academic curriculum has been developed, which contains elements of coordinated classroom and workplace learning. The programme consists of 6 semesters in the institution and 2 semesters in the industry. For Ethiopia's textiles and apparel sector – this would be much shorter given different requirements.

- In Thailand, a similar participatory teaching programme focused on work-integrated learning has been developed. This model uses a “Tri-lateral Network Interaction Model” between university, business and government. Both programmes are part of a research cooperation project between GIZ and OECD.

- In Korea, the Work-based Learning System is where in-company trainers train workers in a company instead of in a school or vocational training institute and provide certifications issued by government and the industry. Companies are provided incentives to facilitate

Source: OECD, GIZ, “The Private Sector's Role in Skills Development and Employment”, 2016; Stakeholder interviews
Recommendation: Institute a human resource management body to handle line worker recruitment across the industry

Constraints

The availability of workers in the required quantity and quality is below the industry demand for various reasons:

- Factories have difficulty sourcing skilled workers as most of the workforce is only beginning to shift from a traditional agrarian society to industrial work

- In spite of offering training for new workers, many apparel manufacturers are still unable to find/hire sufficient number of workers due to institutional recruitment challenges

- There is a lack of workforce co-ordination mechanisms across the industry – while Hawassa IP has a workforce database system in place, there is no visibility into movement of labour at an industry level to inform decision making e.g. targeting initiatives to improve retention

Benchmarks Informing Recommendations

- Cambodia has historically faced a shortage of labour in SEZs, due to migration of workers to Thailand to seek better wages

- In 2011, the Phnom Penh Special Economic Zone in Cambodia began a national recruitment drive to add workers to meet an anticipated rise in demand for labour – there is an opportunity for Ethiopia to co-ordinate such drives across the sector given the current and anticipated labour shortages

Recommendations

- Develop a centralized industry-wide human resource management body to support with worker recruitment across IPs and factories located outside of IPs. Responsibilities include:
  - Conducting recruitment drives for factories – factories can submit requests with worker demand, and pay a minimal fee to support with co-ordination activities
  - Co-ordinating with TVETs to place students in factories for industry training, and channeling TVET graduates into factories
  - Creating and managing an industry-wide employee database to provide visibility of labour movement to help target interventions, (by identifying employment status):
    - Data can be used to determine firms to prioritize for sourcing or retention initiatives depending on turnover
    - Gov. should mandate and facilitate legally binding agreements in the industry that require employers to be compensated for workers poached within an agreed-upon duration e.g. 1 or 2 years (to encourage firms to invest in better training for their own workers). However, as workers need to be accorded freedom to switch employers, both employers and workers should have a voice in the agreement design
  - Hawassa IP has a workforce database that can be used to design an industry-wide model – it involves use of biometric data and unique identification numbers to track workers.

Source: The Phnom Penh Post, Phnom Penh SEZ to add workers to meet shortfall”, 2011; Stakeholder interviews; Dalberg analysis
Recommendation: Establish a human resource development fund to support with worker training in both soft and hard skills

Constraints

- Ethiopia faces a structural challenge to industrialization - majority of the population is agrarian, which makes it difficult to source skilled workers

- As a result, the T&A sector experiences various challenges:
  - Low rates of labour efficiency – varies from factory to the next, one international factory indicates reaching efficiency levels similar to Bangladesh (47-48%) while others experience rates as low as 25%. Low efficiency is due to low technical (machine mechanic and electrical/electronic) skill level and unfamiliarity with factory work. It limits progression to higher quality and higher fashion products and consequently the range manufacturers can provide buyers
  - Absenteeism from work (resulting from poor attitudes towards work, and structural challenges e.g. transport)

- Efforts are being made to address the skills gap through training programs supported by partners such as the World Bank, GIZ, and Enterprise Partners

- Despite these efforts, factories are still faced with challenges in meeting demand, low efficiency, and poor soft skills from workers

Recommendations

- Options for deployment of funding:
  - Grants for training – Funding is given to pre-approved public or private training service providers who apply for funding. The grants are self-sustaining because they boost employment and hence the volume of the payroll levy. Recommended option as it has low administrative burden and has proved effective for pre-employment training (needed to build the skills base)
  - Reimbursement for training – the fund reimburses a portion of training expenses; well-suited for in-service training (on- or off-site), but needs a higher level of administration
  - Train or pay schemes: Exemptions from levies for firms that train workers. Not ideal as firms already provide some training

- Representation: the fund should have a high autonomy, with employers having majority seats on the Board to ensure the fund matches industry needs, and does not become too bureaucratic

- Implementation: ETIDI is ideally placed to be in charge of approving training organizations

- Role of TVETS: TVETs could be a potential partner in delivering training, but would need support in:
  - Developing highly specific, practical, and short term courses (1-6 months), to meet the labour demand at operator level
  - Equipping with the relevant machines to provide training at the scale required

Global experience highlights how skills funds can be leveraged to improve worker skills and efficiency

**Benchmarks Informing Recommendations**

- **The skills levy has been implemented in more than 60 countries**, and has been an effective way of encouraging companies to train and retrain their workers:

- **Malaysia** – The Human Resources Development Fund (HRDF) is an organization under the Human Resources Ministry of Malaysia with a mandate to **catalyze the development of competent local workforce**. A payroll levy of one percent for employers with ≥ 50 employees (or, 0.5 percent for small enterprises that wish to participate) is used for partial reimbursement of approved training expenses. Those who have contributed a minimum of six months are then eligible to claim a portion of allowable training expenses up to the limit of their levy payments for the year. In addition, the HRDF provides firms with grants for developing training plans.

- **Nigeria** – The Industrial Training Fund (ITF) is utilized to promote and encourage the acquisition of skills in industry or commerce in Nigeria in order to **generate trained manpower sufficient to meet the needs of the economy**. It provides that a maximum of 50% of levy be paid to up-to-date levy contributors who satisfy laid down conditions for claiming Reimbursement. The schemes ensure that: training activities are spread to all levels of workers in organizations; employers training programs are relevant and effective; training programs are properly implemented and evaluated; training activities, according to the needs of the employers and the economy as a whole, are encouraged. It also provides human resource development information and training technology services to industries to enhance their manpower capacity and in-house training delivery effort.

- **Singapore** – The Skills Development Fund (SDF) support is used to support workforce upgrading programmes and to provide training grants to employers when they send their employees to attend training. Under this system, an employer tax on low-skilled labour finances government grants for training, including at government-provided training centers. The effect has been to penalize companies for long-term use of unskilled labour and incentivize employer commitments to training. The fund is run by the Singapore Workforce Development Agency (WDA). The WDA provides financial incentives to companies that send their employees on training programmes that include Basic Education for Skills Training (BEST), Modular Skills Training (MOST), Worker Improvement through Secondary Education (WISE), Core Skills for Effectiveness and Change (COSEC), and Critical Enabling Skills Training (CREST).

Recommendation: Maximize return on investment in skills training by setting up worker service support centers to improve retention

Constraints

- High turnover in factories – high turnover is partly due to low wages, difficulty adjusting to factory life, and communication barriers between workers and managers
- Turnover ranges from 10% to as high as 70% in a year for various factories
- High turnover further exacerbates the challenge of low efficiency, as returns in skills development are not fully realized

Benchmarks Informing Recommendations

- GAP has partnered with ILO’s Better Work programme to provide a Workplace Cooperation Program for its factories, that gives workers and managers the skills they need to resolve workplace issues
- Brandix, the largest exporter of apparel in Sri Lanka, has established an employee focused culture and CSR initiatives in their worker communities to build loyalty:
  - Provides free transportation, onsite health clinics, and discounted grocery shopping
  - As 85% of employees are women, it provides child care, pregnancy care, and flexible-work arrangements

Recommendations

5d Establish workers support service centers in industrial parks to support workers with adjusting to industrial life

- Specific services that would be provided to help workers make the transition to industrial life include counseling and mediation between workers and managers
- Given that about 70% of the workforce in the sector are women, companies can build loyalty / retention by providing services that are likely to increase retention of female employees e.g. child care, reproductive health education etc.
- The worker support centers should also provide training for mid-level managers to understand workforce motivations, conflict resolution and communication to improve labour management relations and reduce the gap between local and expatriate staff

Examples of successful interventions in Ethiopia:

- Hiring a counselor at one of the factories in Hawassa industrial park increased workers’ productivity by 15%
- Engaging a third party to assist with communication between disputed overtime payment in another factory resulted in clarification in the discrepancy of payment, and prevented the workers from leaving

Constraints Informing Recommendations

- Banking-Access to FX
- Workforce Dev’t
- Customs & Logistics
- Industrial Park Dev’t
- Local Capability Support

High turnover is primarily caused by low wages (do not correspond to cost of living). Employers cite the main cause of worker loss to other factories as a slight increase in wages. Employees also leave the industry altogether, preferring to work in sectors with more attractive wages (e.g., construction).

Historically, T&A sector wages globally were driven down by the price sensitivity of buyers. However, buyers look to governments to set a minimum wage to avoid reputation risk associated with perceptions of poor worker treatment, and as they prefer not to engage directly with workers.

Globally, apparel exporting countries have instituted a minimum wage, which has been rising over the past years due to inflation, pushes by local labour unions, and government action to shorten the gap between minimum wage and living wage. Bangladesh has set a minimum wage rate for 42 sectors; Cambodia in 1 sector (apparel and footwear) and Vietnam in every sector.

Cambodia’s minimum wage is adjusted annually through a consultative process between the Ministry of Labour and Vocational Training, employers, and workers. Workers are also entitled to a range of mandatory allowances in addition to the minimum wage itself. Malaysia implemented a location-based minimum wage in 2013, to increase workers' efficiency. It was feared that employers would reduce non-wage benefits (e.g., health insurance, meals, and transport) to substitute for higher costs but workers' productivity proved otherwise.

Recommendation: Set a minimum wage for the sector to improve workforce retention and encourage investment by buyers keen on social compliance.

Constraints

- High turnover is primarily caused by low wages (do not correspond to cost of living).
- Employers cite the main cause of worker loss to other factories as a slight increase in wages.
- Employees also leave the industry altogether, preferring to work in sectors with more attractive wages (e.g., construction).
- Historically, T&A sector wages globally were driven down by the price sensitivity of buyers. However, buyers look to governments to set a minimum wage to avoid reputation risk associated with perceptions of poor worker treatment, and as they prefer not to engage directly with workers.

Monthly wage distribution in global apparel industry (USD)

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<th>Country</th>
<th>Monthly Wage</th>
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<td>Turkey</td>
<td>600</td>
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<tr>
<td>China</td>
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Recommendations

- Establish a minimum wage for the sector; factors to consider to achieve both worker and employer satisfaction include:
  - National level vs location specific wages (e.g., IPs or regions) – either will require regular cost of living, household income and labour market surveys to inform the wage setting and adjustment.
  - Productivity - minimum wage establishment and increase needs to be coupled with an increase in productivity for Ethiopia to remain an attractive destination (provide value for money) for investors.
  - Profitability – enterprises ability to pay increased wages, taking into account additional bonuses/benefits already provided.
  - Frequency of adjustments – gradual, steady adjustments are recommended; sudden and irregular high increases irregularly can cause difficulty for employers, and if wages are unchanged for a long time inflation reduces the real value of current wages.
  - Consultative processes – government, employers and workers should be involved in determining and revising the wage rates.

Benchmarks Informing Recommendations

- Globally, apparel exporting countries have instituted a minimum wage, which has been rising over the past years due to inflation, pushes by local labour unions, and government action to shorten the gap between minimum wage and living wage.
- Bangladesh has set a minimum wage rate for 42 sectors; Cambodia in 1 sector (apparel and footwear) and Vietnam in every sector.
- Cambodia’s minimum wage is adjusted annually through a consultative process between the Ministry of Labour and Vocational training, employers and workers. Workers are also entitled to a range of mandatory allowances in addition to the minimum wage itself.
- Malaysia implemented a location-based minimum wage in 2013, to increase workers’ efficiency. It was feared that employers would reduce non-wage benefits (e.g., health insurance, meals, and transport) to substitute for higher costs but workers productivity proved otherwise.

Recommendation: Set logistics competitiveness targets around cost and lead time, and develop a roadmap to achieve targets for the sector

Constraints

- Customs import lead times are long compared to countries with a strong record of T&A exports; 17 days for Ethiopia, compared to 5 days for Sri Lanka
- Despite the development of a national logistics strategy there are no national targets for competitiveness or a roadmap to meet targets, which are important for buyers to understand where Ethiopia is headed

Benchmarks Informing Recommendations

- **China**: the national logistics strategy is the responsibility of the Ministry of Transport, restructured in 2008. In addition to planning policies and standards, the Ministry also supervises the implementation of plans. To support the implementation process, a national inter-ministry conference on logistics brings 15 relevant agencies together once or twice per year.
- **Indonesia**: National Logistics Blueprint sets out the roadmap for the development of the industry by government, local and provincial authorities and the private sector over the period 2011-2015. The national logistics strategy was formulated through the cooperation of a range of experts and practitioners, including relevant ministries and government agencies, private sector (through associations), international institutions and academics.
- **Malaysia**: National logistics plan is incorporated into the Third Industrial Plan for 2006-2020, coordinated by the Ministry of International Trade and Industry, which includes logistics as a priority industry. Preceded by an in-depth analysis of the current state of the logistics industry, the plan then sets out clear targets based on the expected increase in total merchandise trade.
- **Korea**: Republic of Korea has been developing comprehensive logistics plans and regulations since the 1990s. Prior to this, logistics plans focused on one transport mode at a time. Since the 2000s, logistics policies have focused on developing logistics as an industry, rather than a supporting function of manufacturing, and developing the Republic of Korea as a logistics hub. As a concrete sign of this, the Goods Distribution Promotion Act enacted in 1991 was replaced by a comprehensive Framework Act on Logistics Policies in 2007.10 Every five years, a 10-year National Logistics Master Plan is developed based on the guidelines set by the Act.

Recommendations

1. **Develop a detailed national implementation roadmap** with set targets around lead-time; the roadmap would need to build on the national logistics strategy:
   - Set long-term sector specific competitiveness targets around lead time
   - Develop an implementation plan to meet targets

Recommendation: Allocate dedicated customs officers with knowledge of the T&A sector at each service point with 24/7 availability in IPs

Constraints

- Import costs are expensive (importing to Ethiopia is more than 5 times the cost of importing to Bangladesh) due to inefficient customs and double handling.
- Efficiency and double handling is related to customs officers’ lack of familiarity with textile products and classifications.
- Furthermore, availability of customs officers is limited, and when available, officers lack a sense of urgency often stemming from their experience with industries where lead times are not as critical.

Benchmarks Informing Recommendations

- In most countries, like Sri Lanka, it is standard practice to ensure that customs officials in industrial parks have extended hours so that they can service the needs of park tenants. For example, in order to facilitate trade, Sri Lanka enabled customs clearance during weekends and holidays as part of its move to modernize the customs clearance process. Customs officers are available 24/7 in the parks.

Recommendations

1b. Establish a customs window dedicated to textile and apparel sector at key shipment points to service the sector.

- Hire customs officers to service the dedicated window with expertise in the T&A sector especially focusing on the ability to differentiate between textiles products and understanding the importance of lead time.
- Ensure adequate shift coverage.
- Provide regular trainings to customs officers to: recognize product country of origin based on the origin certificate, comply with new import regulation norms, and get them familiarized with textile products as well as their uniqueness and needed flexibility.

1b. Ensure each industrial park is equipped with 1-3 dedicated customs staff who are available at least 18 hours a day for 6 days a week (ideally 24/7) to facilitate clearance of imported goods.

- Ensure industrial parks are staffed with customs officials who have expertise in the T&A sector.
- Provide regular communication to customs agents to ensure they have access to the latest information and are empowered to make decisions as needed.

Source: Stakeholder interviews
**Recommendation:** Develop clear standards and procedures to facilitate customs clearing for the T&A sector

### Constraints

Customs clearance is slow, and lacks efficiency and standards
- **77% of the time required to trade across borders** is needed for document preparation and customs clearance and inspections.

- **Documentation and clearance can also add over USD 1,000 to the cost of the trade procedure.** By the time documents are prepared and imported goods are cleared, manufacturers will have already spent as much money as their OECD competitors will have spent on the entire trade operation

- **10% of all goods shipped in one instance** were delayed directly as a result from inefficient customs handling

### Benchmarks Informing Recommendations

- **India has a clear set of guidelines to facilitate customs clearance.** The manual outlines specifications such as: continued detention of any export goods in excess of 3 days must be brought to the notice of the Commissioner of Customs, who will safeguard the interest of the genuine exporters as well as the revenue. Additionally there are specifications to hold officers accountable, specifically outlining: ‘in cases where detention of goods have been ordered on insufficient and weak grounds resulting in unconditional release of detained goods in adjudication stage itself, where importers have to suffer avoidable demurrage charges/loss by pilferage’

### Recommendations

10. **Set clearance standards and procedures**
- Develop a clear set of guidelines to facilitate customs clearance recognizing the importance of lead times for the sector
- Guidelines should include a set of procedures, standards and timelines for customs clearance under various possible scenarios for the T&A sector

10. **Implement an accountability mechanism for customs officers**
- Train customs officials on new standards and electronic management system
- Institute a penalty for customs officers who are unable to clear the goods in the set standard of time
- Hold customs officers accountable when there is any discrepancy in registration or reconciliation, maintaining a track record of their performance

**Recommendation:** Develop a duty free zone to warehouse inputs, and incentivize local firms to develop container parks in/around IPs

**Constraints**

- There are no companies offering warehousing services around the industrial parks
  - Manufacturers are negatively impacted by the stock of inputs they’re keeping; storage space in industrial parks is constrained – almost 60% of the space in Bole Lemi is used for non-production purposes
- There is no system to manage in-going and out-going empty containers in industrial parks (currently there is a 1 to 5 imbalance)
  - There is no container park in/around the industrial parks – incoming containers have to be sent out immediately
  - There’s a plan to invest in the development of container parks by ESL, but there’s a delay in implementation

**Recommendations**

1e **Develop a national duty free zone to warehouse inputs including machinery spare parts for the sector**
   - Optimal location should be selected for the zone based on central proximity to industrial parks
   - Allow local and international firms to provide services

1f **Incentivize firms to develop container parks in and around the industrial parks**
   - Provide land around the industrial parks and financial incentives such as improved access to loans to encourage container park development
   - Allow for select firms to pilot container parks in one industrial park (e.g. Bole Lemi) and expand once effectiveness is shown

**Benchmarks Informing Recommendations**

- **In India multi-modal transport** was a monopolized by the Container Corporation of India until 2005. In 2005, licenses were given to 13 new private players to meet the growing demand driven by increased trade. A number of initiatives were also instituted to revolutionize the logistics sector. Some of these include:
  - Development of warehousing facilities at a goods terminal by Central Warehousing Corporation (CWC) - CWC built a state-of-the-art warehouse with a capacity of 15,000 tons and provided ancillary facilities in the integrated goods shed complex of the White Field Satellite Goods Terminal in Bangalore
  - Government of Gujarat identified six suitable locations, compared to three locations as identified by the Ministry of Railways, for setting up Logistic Hubs in state

Recommendation: Develop eco-industrial and ‘green’ parks to support investment promotion in building a brand known for compliance

There are many examples of countries ‘going green’ such as:

- In 2006 the Chinese Environmental State Agency (SEPA) developed criteria for EIPs. SEPA emphasized a collaboration between companies and/or plants that hinged on resource sharing and waste exchanges that targeted resource efficiency and waste minimization. The companies’ collaboration would be similar to a natural system—a circular industrial path of “producer-customer-decomposer.” SEPA classifies the main characteristics of an EIP under four criteria.

- Japan has developed eco-towns; Kawasaki Eco-Town, a resource recovery park, provides environmental services to the adjacent community through industry modernization. The resource recovery park is responsible for 69,000 tpa of office waste recycled to sanitary paper and 130,000 tpa of plastics reused for form boards. In addition, the reduction in blast furnace use and the use of synthesized gas production and alternative fuel have led to 0.5 million tons of waste diverted from landfills and US$130 million annual economic benefit.

- In China, the model of “circular economy system” has been adopted, especially in the iron-steel-metal products industrial ecosystem in China. This model has resulted in a 97.09 percent water reuse rate, 100 percent gas recovery rate, 100 percent iron dust utilization rate, 100 percent slag utilization rate, 100 percent steel slag utilization rate, and 100 percent boiler fly ash (slag) utilization rate.

Recommendations:

- ‘Green’ existing industrial parks
  - Set uniform targets and standards across IPs to improve the environmental performance of individual businesses
  - Ensure that each park tenant has an environmental management system with key performance indicators and monitoring tools
  - Set annual improvement targets for park tenants and promote the reuse, recovery and recycling of materials

- Develop eco-industrial parks: adopt clear regulations specifying the design and criteria for infrastructure
  - Develop an integrated master plan to integrate EIP and the surrounding social and economic community; conduct baseline audits of land, water, waste and air quality to establish performance indicators
  - Create a definition for an Eco-Industrial Park, adopt clear regulations specifying the design and infrastructural criteria and performance standards (with metrics)
  - Use appropriate certifications for EIPs, e.g., Promote the eco-efficiency of enterprises by incentivizing ISO 14045:2012 and other appropriate certifications
  - Clarify the division of responsibility between the EIC, EPA and local authorities to monitor and enforce environmental standards

Benchmarking Informing Recommendations

Source: Stakeholder Interviews; World Bank, Mainstreaming Eco-Industrial Parks, 2016; Meng, Xiaojie; Zhang, Yan; Zhao, Yuchao; Lou, In Chio; and Gao, Jixi, REVIEW OF CHINESE ENVIRONMENTAL RISK ASSESSMENT REGULATIONS AND CASE STUDIES, 2012
Recommendation: Develop a blueprint for integrated industrial parks planning, outlining the necessary elements and a roadmap to engage actors

Constraints

Plans for industrial parks and local economic development are not coordinated across agencies

- IPDC focuses primarily on infrastructure within the park, and neglected cities' living function
- Lack of affordable housing and limited transportation for workers is causing a ripple effect impacting worker efficiency rates and turnover

Recommendations

4b Develop a blueprint to guide the creation of integrated industrial parks which provides four basic functions, namely, living, working, recreation and transportation

- Assess existing IPs to highlight current gaps in bridging the industry-city divide
- Gather lessons learned from Velocity’s efforts to create an integrated city with housing, and recreational activities
- Measure the worker-resident balance ratio (number of jobs available versus number of residents) at each IP – to achieve balance ensure that worker-resident balance ratio is over 60 percent
- Develop design blueprints for future IPs to ensure that future IPs (both inside and surrounding area) follow the concepts of urban planning and meet the needs of workers especially along living, recreation and transportation
- Design structures to facilitate PPPs and private sector involvement in building necessary infrastructure (e.g. housing), and administering services around the industrial parks

Benchmarks Informing Recommendations

- Suzhou industrial park (SIP) was spearheaded by the development of a sophisticated and far-sighted urban planning. SIP was officially launched in 1994 but the plan was done a year earlier in 1993. The first phase of the plan covers about 70 km-sq which was developed by Sino-Singapore Corporation. The plan was revised every 5 years, in 2000 and 2006. In 2000, the plan was integrated with the Suzhou old city. The plan included a general framework, a detailed master plan, and also set up more than 300 professional plans

- Additionally, socio-economic and spatial planning by the central and local governments has played a major role in the transformation of Shenzhen, China, from a rural country into a modern metropolis. Shenzhen had very stringent fiscal and credit policies to get finance from China’s state banks and domestic enterprises to construct industries, residences, public building and utilities and green open spaces.

Recommendation: Develop capacity and quality of local auxiliary industry

Constraints

- Low quality of local products drives importation of auxiliary inputs e.g. cartons, carton boxes, zippers etc. by apparel manufacturers
- Local auxiliary input providers are not exposed to the quality requirements of the export market, and lack the relationships with manufacturers to provide access to this
- Low number of both local and international input producers – international producers are hesitant to enter the market until it achieves greater scale, as they are heavily dependent on demand from apparel manufacturers
- Local producers lack incentives to produce for the export market, since they still pay import duty as indirect exporters

Recommendations

- Capacity and quality of the local auxiliary input industry can be improved in several ways:
  - Provide incentives for joint ventures and auxiliary input providers who supply to exporting apparel manufacturers to encourage upgrading of quality standards to meet export demand e.g. preferential financing and scrapping of taxes paid on imports for auxiliary input manufacturers
  - Bring in expatriates to conduct quality enhancement trainings for companies that are unable to afford them
  - In the long term (once quality has improved), consider introducing local sourcing quotas for non-auxiliary inputs for apparel manufacturers

Benchmarks Informing Recommendations

- Auxiliary inputs are the easiest point in the value chain to incorporate local players (in terms of both time and financial investment required). For example, in 2009, Bangladesh produced only 2% of the cotton needed in the country, compared to 80% of accessories
- Bangladesh supports backward linkages by providing local sourcing incentives e.g. 15% cash subsidy of the fabric cost to exporters sourcing fabrics locally – a similar arrangement could be provided for auxiliary inputs in Ethiopia
- In Sri Lanka, joint venture companies have enabled small firms to specialize in various services requiring handwork and helped upgrade them to a level where they are comfortable placing orders with them. This happened due to the exclusive availability of export quotas to small firms and the prohibition of quota sales, which required large firms to sub-contract to smaller ones and help them upgrade their production and facilities. For Ethiopia, the establishment of a quota system would first need to ensure that local producers can meet quality requirements demanded by exporting manufacturers

The ginning sector produces low quality outputs and experiences low productivity due to the following:

- **Old and outdated equipment** – current equipment is old and outdated, which deteriorates the quality of cotton and seed. It also increases cost of production and maintenance.
- **Low financial capability to invest in new equipment** – new equipment requires high capital investment. Machinery imports are only duty free in the establishment phase, after which import duty is charged on machinery and spare parts. Domestic industry players also identify difficulty securing financing as a key barrier to growth.
- **Lack of quality standards and processes** e.g. in handling and storage. This is also caused by low technological know-how.
- **Underutilization of existing facilities** driven by low cotton supply and declining production.
- **The ginning sector is classified as a services industry**, and as a result does not receive incentives available to manufacturers.

Like ginning, the local textiles industry is largely unable to meet export quality requirements:

- **Local fabric mills are few in number** and unable to supply the apparel industries from locally produced fabric.
- **Value adding technologies required for the export market are not performed and would require additional investment in machinery, and technical knowledge and skill.**

**Recommendation:** Promote joint ventures in ginning and textiles to address the equipment, financing, and skills gaps that reduce productivity.

**Constraints**

The ginning sector produces low quality outputs and experiences low productivity due to the following:

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- **Lack of quality standards and processes** e.g. in handling and storage. This is also caused by low technological know-how.

- **Underutilization of existing facilities**, driven by low cotton supply and declining production.

- **The ginning sector is classified as a services industry**, and as a result does not receive incentives available to manufacturers.

**Recommendations**

**Given the deep-seeded changes that need to be implemented in the ginning and textiles industry in terms of equipment, quality control and expertise:**

- **Promote joint ventures in ginning and textiles**
  - MoTI, ETIDI and EIC to facilitate introductions between foreign investors and local ginneries to encourage joint ventures in the ginning industry – this will ensure capital for new machinery, up to date expertise and industry knowledge is integrated, while boosting local capacity.
  - Joint ventures can be incentivized through fiscal incentives.

- **Structure foreign investment in ginning to be accompanied by cotton production**
  - This will help ensure that cotton supply is of required quality and can meet the demand.
  - Some investors entering the ginning market are also establishing cotton farms. This can be encouraged on a wider scale by offering land incentives for investors in ginning.

- **Reclassify the ginning industry under manufacturing and not services to allow access to incentives that would promote investment**
  - The manufacturing sector receives certain benefits e.g. prioritized access to forex to facilitate imports – this would enable ginneries to upgrade equipment.

**Source:** ETIDI Textile and apparel Technology Roadmap; Stakeholder interviews
Joint ventures have successfully been executed, but certain countries provide lessons on measures to ensure host country achieves desired benefits

Benchmarks Informing Recommendations

- Research on Pakistan’s cotton ginning industry indicates that with ginneries struggling with high interest rates on loans, heavy taxes, owner’s education level, and old technology, joint ventures were the most suitable alternative for financial solutions, which private financiers cannot necessarily be compelled to provide.

- China has historically pursued joint ventures in ginning - it is the world’s largest producer of cotton and silk, and began to seek joint ventures when supply shortages were hampering production and exports.

- China Textile Industrial Corp. has established a joint venture knitting mill in Guyana, Bahamas and other projects in Nigeria, Pakistan, Brazil and Uganda. In the Bahamas, for example, partners supply raw materials and sites, the Chinese provide equipment, technology and management personnel. In Ethiopia, investment in cotton production would likely be required to meet quality and quantity demands.

- Joint ventures in other countries highlight that these could pose risks for local populations if appropriate measures are not put in place. Some lessons can be drawn to enforce measures that benefit local workers and farmers:
  - **Protect wages of local workers** - The Zambia-China Mulungushi Textiles Company established in 1997 was a joint venture between Qingdao Textiles & Zambia Ministry of Defence. The venture rehabilitated a dilapidated industrial site and increased productivity of the ginnery. However, suppressed wages, labour unrest, and increasing global competition led to the Chinese abandoning the investment (2006).
  - **Prioritize investors that will develop both ginneries and cotton plantations** and cotton plantations – this will (i) maximize ginnery utilization and (ii) help to lower cotton prices to an acceptable level, but also prevent driving down of cotton prices for local farmers by international ginneries that did not own cotton plantations, as has happened in countries like Kenya, Benin, Tanzania, and Uganda.

Recommendation: As a medium to long term intervention, strengthen local cotton sector's incorporation into the export supply chain

Constraints

- **Low quality of locally produced cotton**
  - Current variety is of short staple length and lower quality, it slows down machines and results in loss of EUR 144,000 for each 100 tons of cotton
  - Contamination due to poor handling by both farmers (picking, transportation) and ginneries (lack of quality processes e.g. storage)

- **Low availability of cotton**
  - Of 3 million ha of available land, only 80,000 ha is under cotton cultivation, 30% by smallholder farmers.
  - While ETIDI has a goal to increase the cultivated area to 500,000 ha, the area under cultivation is expected to decrease to 60,000 due to farmers switching to other crops e.g. sesame because of erratic weather conditions, and susceptibility of the dominant cotton variety to pests
  - Security and land use rights pose challenges for investors interested in large scale farming – clear rules on land property rights do not exist, and land acquisition is a complex and constantly shifting process causing investors to fear displacement of occupants, conflict with communities and the associated reputational risk

- **High prices** – local cotton is 10% more expensive than imports because of low quality impacting processing, lack of transparency in pricing and low availability

Recommendations

- Ethiopia has the advantage of having agricultural land & conditions to grow cotton; this should be maximized even though benefits to the industry will manifest in the long term

  - **Revamp the existing research centre for cotton**
    - The capabilities of the center should be enhanced to help fast-track growth of better cotton varieties through production of improved seeds, testing, accreditation and quality assurance
    - The center’s mandate should include supporting training of farmers and ginneries on best practices of handling cotton, and can leveraging ETIDI’s support

  - **Promote FDI in cotton farming as this is likely to have higher RoI than targeting smallholder farmers (due to scale)**
    - Work with regional authorities to streamline land lease & regulation to encourage large scale farming by investors
    - Establish clear community engagement and compensation protocols for moving land occupants, facilitate community dialogue on behalf of investors, and implement regional land ownership registration schemes

Source: ETIDI Textile and apparel Technology Roadmap; Stakeholder interviews
Examples from Asia highlight that various countries prioritized different types of linkages, influenced by considerations of cost and competitive advantage

### Benchmarks Informing Recommendations

- China has the highest backward linkage coefficient of any textile and apparel manufacturing country, largely supported by its cluster approach. China highlights the need for targeted and comprehensive government support that address challenges comprehensively to facilitate backward linkages.
- Between the 1980s and 1990s, town governments (i) supported local farmers to establish textile enterprises, (ii) set up a professional team to assist local enterprises in purchasing raw materials and selling fabric products; and (iii) provided financing guarantees to help SMEs with outdated equipment secure financing for upgrading.
- China also developed supply chain cities, which focused fully on the production of one item and ensured the full supply chain is present (e.g. “button cities” and “sock cities”).
- Bangladesh has integrated backwards successfully in sectors where cost of entry was lower i.e. knit fabrics, woven fabrics to a lesser extent, and accessories. However, Bangladesh imports 99% of its raw-cotton.
- Bangladesh imports 38% of its fabric and, domestically supplies the other 62%. Local suppliers meet 90% of the demand for knit fabrics and 40% of the demand for woven fabrics for export-oriented clothing firms.
- Integration in knit fabrics was faster due to (i) the relatively lower investment requirement and (ii) simpler manufacturing and process technology that could be adopted easily. A knit fabric manufacturing, dyeing and finishing unit could be set up at a tenth of the cost of a woven fabric manufacturing plant.
- Sri Lanka has the lowest backward linkage coefficient compared to China, India, Bangladesh and Vietnam.
- Sri Lanka opted to prioritise high value addition for niche markets over cheap production. Domestic production was unable to provide the range of material and designs needed to accommodate the changes in demand and styles that occur several times a year for value added and fashion apparel, due to cost and capacity issues.
- As a result, Sri Lanka prioritized flexible importation of fabrics over full integration into the textiles industry, viewing ability to from the most competitive supply source as a key success factor.
- However, Sri Lanka has successfully developed backward linkages in ancillary inputs as this did not require as heavy an investment as textiles.

### Ethiopia's Opportunities

Ethiopia should prioritize backward linkages in auxiliary inputs due to lower costs, and in textiles as current customs, logistics, and forex challenges reduce the viability of upgrading production without a robust local supply chain.

Recommendation: Select and provide a package of support (technical, financial, etc.) to potential domestic star performers

Constraints

- Domestic manufacturers traditionally have focused on serving the domestic market, where they are able to make higher margins and have lower quality requirements.
- Some domestic manufacturers show potential and interest in expanding to the export market but have little tailored support and incentive to meet their needs which surpasses the ‘typical’ domestic firm.

Benchmarks Informing Recommendations

- **China – Star program and cluster support:** Eagle Plan in Nanhai, combined the strength of clusters with a star program. The local government selected eight local clusters and supported firms within these clusters through i) financing (i.e. RMB 80 million in credit guarantees, allowing them to get bank loans worth 10-fold of the credit guarantee); ii) technology innovation; and iii) regional brand support.
- **India - Trade fair attendance support:** In India MSME exporters are supported with covering 75% of stall charges paid up to maximum of Rs. 2,25,000 (90% of stall charges paid up to maximum of Rs. 2,70,000 for women entrepreneurs) for one fair exhibition.

Recommendations

6a **Select ‘promising firms’** on the basis of:

- **Interest in exporting** - defined as a target of greater than 70% of production going to export
- **Export track record** - ability to show track record of engaging in exports (or sub-contracting) for the past five years
- **Challenges** - ability to pinpoint specific operational challenges impeding greater performance

Provision of support to domestic firms:

- 5 year support provided to selected firms (intensive 6 months) and phased out over the remaining duration
- 10 firms selected every 5 year to ensure continuity of new emerging star performers
- ETIDI to provide a dedicated expat consultant to provide tailored support on regional branding, quality assurance, and technology innovation (support will vary depending on needs of each company)
- ETIDI to set up a company cost-sharing mechanism to support the cost of market development (eg. Supporting attendance at international trade fairs)
- Design a set of ‘special’ incentives intended to facilitate ease of doing business such as extended expatriate tax exemption from 3 years to 5 years.

Recommendation: Promote knowledge transfer from expatriates to local employees by instituting guidelines around expat hire

Constraints

- Current regulations allow for, and promote, the hire of expats. For example, manufacturers are allowed to hire expats who are exempt from income taxes for 2 years.
- However, existing incentives focus on bringing expatriates to Ethiopia; there is less emphasis placed on ensuring that knowledge transfer takes place and a lack of measures to determine the impact and the degree of knowledge and technology transfer.
- Furthermore, language and cultural barriers obstruct effective knowledge transfer.

Recommendations

- Develop specific measures to guide hiring of expatriates in the sector. Specific measures should include:
  - Requirement to train a local individual as an apprentice.
  - Obligation for the expatriate employee to take local language and cultural competency classes upon arrival.
  - When leaving the country, each expat should submit a list of employees who they have trained to take over their tasks.
  - Ensure that there is an optimal ratio of expat to local employees, suggest 1:20 (foreign: local).
  - Publish and promote guidelines; ETIDI and EIC in collaboration to manage data collection on expatriate hires.

Bangladesh has policy level guidelines for knowledge transfer – The 2011 Bangladesh Investment Development Authority (BIDA) guidelines were designed as a roadmap for investing in Bangladesh. This handbook includes guides on various policy decisions including expatriate employment. In order to promote knowledge transfer, the handbook states that foreign nationals must transfer their expertise to local employees within 5 years of their employment, and when the foreigner leaves the country, he/she must submit a list of employees whom they have trained. Additionally, there is also a ratio requirement (number of the expatriate employees in an industrial enterprise, to local employees), which states that the ratio should not exceed 1:20 (foreign: local).

Recommendation: Develop regulations and approval processes to guide and control sub-contracting practices

Constraints

- Although the practice of sub-contracting occurs, the current eco-system does not have any incentives or controls in place to regulate the sub-contract market
- Restrictions imposed on the movement of duty free imported inputs outside the industrial parks further impedes the ability of firms to engage in sub-contracting

Recommendations

6c Develop regulations and standards to develop sub-contract market ensuring that sub-contracting takes place in a legal and authorized manner
- Develop specific provisions that allow for sub-contracting – purpose would be to allow for the movement of duty free imported goods outside IPs for approved sub-contractors
- Develop a system for sub-contractors to obtain clearance once every two years based on their ability to meet standards (once clearance has been obtained movement of goods outside the park to those sub-contractors shall not be restricted for the specified period)

Benchmarks Informing Recommendations

- Although subcontracting can help build the domestic industry, lack of regulations can result in a backlash effect, as was the case in Bangladesh in 2012. The chain of sub-contracting has become increasingly more convoluted, and in some cases there can be up to four tiers of firms with homeworkers on the lowest tier with almost no power and are difficult to regulate. In Bangladesh, as the sector grew, subcontracting became very common. However, the lack of regulation led to serious political backlash in 2012 when a fire broke out at the Tazreen Fashions factory in Dhaka. Following the fire there was paperwork found linking Tazreen to buyers such as Walmart, as the effect of unauthorized sub-contracting.
- Regulations can help control how sub-contracting takes place, for example in India, a notification was issued in 2003 by the Central Board of Excise and Customs, specifying when, and how sub-contracting can take place. It outlines that sub-contracting outside the zone is allowed based on the approval from a customs officer. It also places limits on the amount that can be sub-contracted based on the free on board value, and requires that proof of the necessity to sub-contract production in a domestic tariff area be submitted as per the discretion of the customs officer

Source: Stakeholder Interviews; Central Board of Excise and Customs, “Non-Tariff Notifications”, 2003; Academia; “Garment Industry Subcontracting Chains and Working Conditions”
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector

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   • Implementation Roadmap
Global experience shows that 1) incentives that address operational challenges are attractive to FDIs and 2) phasing-out tax incentives can be successfully undertaken

- Mauritius, and Malaysia are examples of successful countries attracting investment that offer many advantages to investors other than tax breaks, such as stable economic and political conditions, a well educated labour force, good infrastructure, open trade for exporters, dependable rule of law, and effective investment promotion systems.

- Indonesia undertook an ambitious tax reform in 1984. The company tax rate was reduced from 45 per cent to 35 per cent and selective tax incentives were totally eliminated; including tax holidays, preferential rates, special investment allowances and selective accelerated depreciation. The number of FDI projects dipped in that year but then climbed rapidly for the rest of the decade.

- Similarly, in China although the type and extent of incentives offered varies by province, city and zone where investment is located as these administrative units have significant autonomy, the various incentive schemes have also changed over the years. Generally, the type and extent of tax exemptions and deductions are now tied to specific performance indicators such as the size of the investment, period of operation, percentage of export.

**Recommendation:** To be effective, incentives need to be targeted & performance-based; they also need to be instruments that address key operational challenges

**Benchmarks Informing Recommendations**

**Recommendations**

1a **Introduce performance-based incentives** to ensure that incentives are specifically tied to Ethiopia’s national sector priorities

- Set metrics and targets
  - Set national priorities as a measure of performance e.g. Increase forex, employment, value addition, local sourcing, exports etc.
  - Set performance targets based on national priorities
  - Develop a set of specific incentives tied to measurable performance around each of the targets

- **Introduce new set of incentives and phase out** incentives which don’t allow for performance measures
  - Assess current set of incentives and identify those to be phased-out (despite the limited value add, certain incentives are considered standard and expected by manufacturers and may need to remain)
  - Introduce new set of incentives to all new investors, slowly phase out current set of old incentives

1b EIC to implement a data management system to track and measure cost and impact of incentives provided

1c **Align incentives to address fundamental challenges**

- Identify bottlenecks faced by the industry (e.g. workforce, infrastructure etc.) and offer incentives to address challenges

**Source:** Stakeholder Interviews; OECD, “Tax Incentives for Investment – A Global Perspective”, 2007
Restructuring the incentives needs to be done across three layers

Across these three layers a mix of fiscal and non-fiscal incentives can be used to achieve relevant goals

1. **Performance-based incentives**: Incentives tied to a set of specifically defined national targets which will be relevant across all types of manufacturers.

2. **Incentives that nudge investors to address their operational challenges**: Incentives which are intended to nudge investors towards having them address challenges such as skills development and infrastructure. These will be relevant across all types of manufacturers.

3. **Manufacturer targeted incentives**: Incentives which are intended to address the specific needs of each type of manufacturer across the supply chain. These incentives should be tailored to the manufacturer.
### Performance-based incentives need to be structured around specified national priorities for the sector

<table>
<thead>
<tr>
<th>Target metric</th>
<th>Short to medium term priority incentives</th>
<th>Benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Increase exports</td>
<td>- <strong>Provide an export tax rebate to garment manufacturers based on export amount relatives to set targets</strong>: 5% tax rebate provided for exports exceeding 150% of export targets, 3% reduction for exports meeting 100%-150% of their yearly export targets and 1% reduction for exports meeting 80% - 100% of export targets</td>
<td>- <strong>Turkey</strong>: provides a tax rebate on specified exported products, additional tax rebate to large exporters based on the amount they exported (4-15 million USD 5% reduction, &gt;15 million USD 10% reduction), export tax rebate scheme for indirect taxes paid at the last and earlier stages of fabrication</td>
</tr>
</tbody>
</table>
| 2 Developing the supply chain | - **Remove VAT on locally sourced inputs** (e.g. buttons, carton boxes, poly bags)  
- Provide an income tax rebate based on percentage of inputs sourced locally on a sliding scale (>80% of inputs, between 50-80% and between 30-50%) | - **Indonesia**: the Ministry of Industry scrapped VAT on raw materials (specifically cotton) to encourage local manufacturers to start sourcing raw materials locally                                                                 |
| 3 Generate employment | - **Provide a cash subsidy on a sliding scale based on percent of employees retained** measured at the end of the year | - **India**: states provide an employment generation subsidy of Rs. 5,000 per month per worker for 7 years for capacity building of workers. To encourage capacity building of women employees, this subsidy will be Rs 6,000 per month per worker for 7 years. India also provides a deduction equivalent to 30% of additional wages/salary (over and above expenditure on wages/salary) available for three years in respect of new workmen employed |

Source: [1] Other national priorities can include environmental compliance, value addition, increase forex etc.; Stakeholder Interviews: EDRI, “Why export promotion efforts failed to deliver: Assessment of the export incentives and their implementation in Ethiopia”, 2017; Dhaka Chamber of Commerce;
Incentives should also be used to nudge investors towards addressing operational challenges faced by investors

<table>
<thead>
<tr>
<th>Target metric</th>
<th>Short to medium term priority incentives</th>
<th>Benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Skill Development</td>
<td>• <strong>Training grants</strong>: Provide training grants for employer-submitted plans to build local human capital capacity, based on a schedule of priority sectors and professions</td>
<td>• <strong>Singapore – Skills Development Fund</strong>: used to support workforce upgrading programmes and to provide training grants to employers when they send their employees to attend training. It leverages an employer tax on low-skilled labour finances government grants for training, including at government-provided training centers. The effect has been to penalize companies for long-term use of unskilled labour and incentivize employer commitments to training.</td>
</tr>
<tr>
<td>2 Infrastructure</td>
<td>• <strong>GoE to provide a 70% matching grant for qualifying employer-submitted plans to develop affordable housing options</strong> around industrial parks. Grants will be processed jointly by MoTI and the Ministry of Housing and Urban Development</td>
<td>• <strong>Mexico – investment in renewable energy</strong>: companies that invest in machinery and equipment for power generation using renewable sources may deduct up to 100% of the total investment in a single year. (If a company is unable to use the full amount of the tax rebate in the first year, they may use the remainder in subsequent years.) Mexico introduced this and other incentives in 2000 to motivate investors of various sizes to enter the renewable energy infrastructure market.</td>
</tr>
</tbody>
</table>

Moreover, incentives should be used to nudge different types of actors across the supply chain to have them address their unique challenges (1/2)

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Example incentives</th>
<th>Benchmarks</th>
</tr>
</thead>
</table>
| 1 Buyers                     | Establish a legal framework to facilitate registration and status in-country, which recognizes buyers as a specific segment of the T&A sector. Legal frame should allow for similar incentives as those provided for international manufacturers such as:  
  • Allow buyers to claim VAT on purchases related to their operations  
  • Duty free imports of machinery for testing  
  • Allowance to hire expats and facilitate work permits for a minimum of 5 years with income tax exemptions  
  • Retention of at least $10,000 in foreign currency per year to facilitate staff trainings abroad and other needs | • Bangladesh - Linkage cash subsidy: manufactures of indigenous fabrics (such as woven, knit, hosiery, grey, printed, dyed, garment check, hand loom, silk and specialized fabrics) supplying their products to 100% export oriented garment industries are entitled to avail a cash subsidy equivalent to 25% of the value of the fabric |
| 2 Auxiliary input producers   | • Provide a cash subsidy to auxiliary input producers who supply their products to garment manufacturers who export 100% of their products | • Mauritius - Export Enterprise Certificate: granted to export oriented enterprises, which export their entire production although authorization to sell a small percentage on the local market (10 to 20%) may be obtained, depending on the nature of the industrial activity. |
| 3 Domestic garment producer   | • Allow 30% of yearly production to be sold to the domestic market specifically for domestic firms who are in industrial parks | |
Moreover, incentives should be used to nudge different types of actors across the supply chain to have them address their unique challenges (2/2)

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Example incentives</th>
<th>Examples from benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>• Provide water and power price predictability for a period of about 5-10 years based on when the manufacturer signs the agreement to reduce uncertainty about future costs</td>
<td>India provides various incentives around electricity and water depending on the state, such as rebates in tariffs for electricity/water/gas • <strong>India, Andhra Pradesh – Power Tariff</strong>; set a power tariff subsidy at 1 per unit for ginning and modern ginning and at 1.50 per unit for other categories (including technical textiles) for a period of 5 years from date of commencement of commercial production</td>
</tr>
<tr>
<td>5</td>
<td>• Allow for accelerated depreciation at the rate of 50%, 30%, and 20% (first, second, and third year) for upgrading their equipment</td>
<td><strong>Bangladesh – Accelerated Depreciation</strong>: allows for accelerated depreciation for new industries at the rate of 50%, 30% and 20% for the first, second and third years respectively, depending on the cost of plant and machinery</td>
</tr>
<tr>
<td>Fabric Mills</td>
<td>• Provide loan interest subsidies for firms upgrading their technologies up to 30-40% of the total amount of interest each year based on the project proposal</td>
<td><strong>India - Technology Upgradation Fund Scheme</strong>: for firms introducing state-of-the-art or near-state-of-the-art technology receive various benefits such as 5% reimbursement of the normal interest charged by the lending agency on rupee term loan (RTL); or coverage of 5% exchange fluctuation (interest &amp; repayment) from the base rate on foreign currency loan (FCL); or 15% credit linked capital subsidy for the SSI textile • <strong>China - Provincial and municipal governments administer a fund to subsidize loan interest for upgrading technologies</strong> and equipment. The fund serves to encourage banks and other financial institutions to increase the magnitude of support to enterprises in technology upgrading. Each project can receive subsidies up 30-40% of the total amount of interest in a year</td>
</tr>
</tbody>
</table>

Source: Stakeholder Interviews; Wahab, “Investment Climate in Bangladesh”; Stewart and Stewart; “China’s Support Programs for Selected Industries: Textiles and Apparel”, 2007
**Recommendation:** Prioritize development of basic products in the short term, while building capacity required to produce higher fashion apparel in the long term

### Constraints

- As Ethiopia is still nascent in T&A exports, it has not yet achieved quality and capability standards that set it apart from competitors
- As the market shifts to respond to online retail market brands who have a greater market share, lead times are becoming increasingly important – Ethiopia will need to offer more value-add solutions to brands to remain competitive

### Benchmarks Informing Recommendations

- Historical trends indicate that most countries that have upgraded product types from basics to higher fashion content over long durations e.g. China upgraded gradually after establishing the basics industry
- Sri Lanka and Turkey have managed to upgrade relatively quickly, largely due to strong relationships and joint ventures with brand marketers
- Overall, product upgrading requires the following factors:
  - Increased investment in machinery and logistics – has largely done through foreign investment. Higher quality/fashion apparel experience quick changes in demand and styles, and have shorter lead times
  - Developing relationships with strategic buyers -
  - Building a strong skills base – higher fashion products are more complex and require higher levels of skill to produce

### Recommendations

#### Ethiopia should take a phased approach by building capacity in basics and using those to transition to higher fashion products

#### Products

- In the short term, focus on achieving scale in basic items that that require less effort to start e.g. basic cotton product items such as knit t-shirts, woven shirts and denim products. These are competitive and have future prospects (they are always in demand)
- In the medium to long term, use the basics platform to enhance skills & technology in higher fashion production. This will improve the industry's resilience to the threat posed by automation (production of basics is easier to automate)
- Specialisation does not limit Ethiopian apparel producers, rather it helps maximize existing potential while new capacities are developed. Basic product categories with the same style can still be produced for different price points and levels of fashion content

#### Capabilities

- Conditions in-country do not currently support a shift to FOB (limited supply chain integration, low access to forex despite high dependence on imports, and inefficient customs and logistics)
- However, as these challenges are addressed, the industry should look to go beyond CMT & assembly and offer more value add solutions e.g. full supply chain management and design

#### Execution: Incentivize both product and capability upgrading

- Offer privileges (e.g. green-lane, skills fund rebate) to those who move into higher value products
- Provide a sliding scale of incentives based on level of value add to the production process (CMT vs FOB)

Recommendation: Target both US and European buyers who are large enough to attract manufacturers to invest in Ethiopia

Constraints

• While AGOA provides cost advantage, there is a risk that AGOA could be suspended at any moment for different, including political, reasons

• US promotes domestic manufacturing and its own well-established cotton industry

• Ethiopia has been able to attract some large buyers e.g. PVH, but the level of investment by buyers and manufacturers is still low – the country did not meet its T&A export targets for 2017 and needs to secure market to achieve its industrialization targets

Recommendations

Ethiopia should pursued both US and European based buyers who have the capacity to bring in manufacturers

Geographic considerations

• Seek out American companies in the short term to leverage the cost benefits that AGOA provides Africa over Asia

• Pursue relationships with buyers in the EU in parallel (long-term focus)
  • Europe provides geographic proximity, and European buyers are increasingly looking to move more of their manufacturing closer to Europe
  • The EU provides duty free access through the EBA scheme which allows for duty free and quota free imports from Least Developed Countries
  • Many buyers are also looking to reduce dependence on Bangladesh

Size considerations

• Focus on buyers that are large enough to attract existing manufacturers to invest in Ethiopia, for the short term. Once heavier buyer presence is achieved, focus can be expanded to include mid-tier retailers

• Buyers/brands to target include GAP, Primark, Target, Macy’s and M&S. Fashion brands to target also include American Eagle, Abercrombie and Fitch, and LMVH

Benchmarks Informing Recommendations

• Experience with PVH (Hawassa) and H&M (Mekelle and Bole Lemi) has already demonstrated the key role that anchor buyers play in recruiting their own suppliers into manufacturing clusters – PVH has recruited more than ten manufacturers into Hawassa industrial park

Source: Enterprise Partners, “A Study for Creation in the Apparel sector in Ethiopia”; Stakeholder interviews
**Recommendation:** Increase use of overseas government representation and third-party affiliations to increase visibility to buyers

**Constraints**

- Pursuit of relationships with international investors has not been active and aggressive
- While Ethiopia is making strides in compliance e.g. through Hawassa IP, it has not yet fully built international recognition as a go-to country for guaranteed compliance

**Recommendations**

**As Ethiopia develops its niche focus and prioritizes buyers/investors to target, it can take the following actions to promote the Ethiopian brand:**

**Utilize overseas representation to build relationships with investors**

- Use overseas Ethiopian trade missions and embassies to arrange meetings with buyers, and facilitate connections between Ethiopian manufacturers across the value chain and foreign buyers in target markets (led by EIC)
- Organize trainings of commercial attachés based in key target markets and trade promotion officials to coordinate, collect, compute and disseminate trade information and promotion (led by EIC)
- Work with Ethiopian textile and apparel manufacturers to increase participation in important international fairs such as Yarn Fair, Heimtextil, Material World, etc. Facilitate connections by creating a database to enable tracking and following up on connections made at trade fairs effectively (Led by EIC)

**Liaise with international bodies to strengthen Ethiopia's social and environmental compliance brand**

- Partner with auditing and certification bodies to measure the environmental and social impact of the production cycle in various parks, and EIC to play the role of communicating compliance to prospective buyers through promotional materials (led by IPDC)
- Encourage Ethiopia-based companies to register with specialised platform (sustainability) groups e.g. Nordic Ecolabel and IDH’s Sustainable Trade Initiative to gain more visibility – these platforms provide vendor rating based on a supplier’s reuse and reduce practices and can endorse Ethiopia-based companies to buyers (led by EIC)
Recommendation: Consider creating a joint taskforce between key supporting institutions to serve as a central coordinating body to drive necessary change

- Establish a joint taskforce (EIC, MoTI and ETIDI), which should serve as a central coordinating body; empowered to drive the necessary changes across the board.
- Statutory authority with cross-cutting roles-combining planning, strategy and coordination functions to promote FDI, boost exports, increase jobs, and upgrade and diversify the economy.
- Responsibility for the mobilization and allocation of capital, forex reform, industrial policy and investment promotion, deregulation, and later for dealing with externalities such as sustainability and social responsibility.
- Structure, function and strategies of these agencies were not static and they evolved along with the changing political, economic and social context in order to maintain their relevance.
- Each associated agency would have a responsible dedicated individual to participate in the coordination meetings (arranged to meet quarterly) and manage needs emerging from the T&A sector.

Source: Stakeholder Interviews
Experience from several countries show that a central and empowered coordinating agency or ministry can help drive change

**Benchmarks Informing Recommendations**

East Asian economies that were able to upgrade and diversify from textiles and apparel to electronics and automobiles all had a central coordinating agency or ministry that served as a combination of think-tank, policy maker and coordination mechanism for the line ministries involved

- **Japan**
  - The Ministry of International Trade and Industry (MITI) played a key role in developing and implementing industrial policy especially during the period of reconstruction and growth from 1950 to the 1970s.
  - MITI regularly monitored the needs of the industry and coordinated closely with the companies and sub-sectors that it was supporting. Deliberation councils, committees and study groups, sometimes with the big industrial associations, were all used to ensure that policy reflected the ever changing reality of industry, and industrial strategies were revised every one or two years to ensure their pertinence.
  - MITI, in addition to strategy and coordination, worked on issues that were beyond the scope of companies (individually or collectively) such as R&D, infrastructure, trade negotiations and overall business environment

- **China**
  - After Deng Xiaoping launched the opening-up strategy in the late 1970s, a State Council Office for Special Economic Zones and Opening-Up was created in order to conceptualize and implement the SEZs.
  - In 2003, the State Council Office for Restructuring the Economic System and the State Economic and Trade Commission were merged to form the National Development and Reform Commission (NDRC), a super-Ministry with 26 functional departments; develops five year plans, investment strategies, industrial policies and economic restructuring programs

- **Singapore**
  - The Singapore Economic Development Board (EDB) was also established in 1961 to attract investment and create jobs. It became the lead government agency for planning and executing strategies to ensure Singapore's position in the global economy. The EDB envisions, plans and delivers medium term strategies that position Singapore as a venue for investment, originally in labour intensive manufacturing and later in capital intensive and high-tech industries

Additionally optimal collection and use of data at ETIDI, EIC, and MoTI can better support investors

**Constraints**

- Lack of information and institutional transparency does not promote effective decision-making in government organizations
- Government staff do not have the necessary information and the ability to make decisions
- Data collection is piecemeal, and paper-based; only certain individuals and organizations are able to access the data
- Decision-making is often not based on data and because of the lack of information investors often have to go to multiple institutions to receive responses to their requests

**Benchmarks Informing Recommendations**

- In China use of data for better decision making was heavily promoted. Government entities at all levels were given an opportunity to increase their own effectiveness and to improve the delivery of public services through the use of Web-based systems and tools. It even went as far as allowing local governments to establish new platforms for land auctions letting developers conduct the land acquisition process online to speed up and facilitate the process.

**Recommendations**

- Invest in electronic data access and management services to promote investment analysis; leverage shared investor data and materials to strengthen the ability of EIC-IPDC-ETGAMA-ETIDI-MoTI to respond effectively to direct inquiries from investors
  - Data should be collected across institutions (EIC-IPDC-ETGAMA-ETIDI-MoTI) on a regular basis (e.g. once a month)
  - Promote regular collection of investor data to inform decision-making
  - Invest in electronic data management software to allow for use across institutions
  - ETIDI to house data electronically and to provide access to key customer-facing staff across government institutions
- Create a culture around using data for effective decision-making and information gathering
  - Promote regular data analysis to understand trends and identify bottlenecks
  - Train staff on data management and data integrity
  - Institute measure to incentivize increased use of data
- Regularly update websites for EIC, ETIDI and MoTI to provide information on latest regulations and laws
  - Revise websites to ensure that they are user friendly and easily accessible to investors

**Source:** Stakeholder Interviews
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector
Buyers are influenced by four key parameters of competitiveness\(^1\) when selecting a T&A sourcing destination.

- **Competitiveness**: A measure of the attractiveness of a country as a sourcing destination across parameters of quality, speed, cost, and compliance and risk.
- **Quality**: Factors that impact the quality of the product such as skilled labour, and technology.
- **Speed**: Factors that impact the speed of production and lead time. Measures of customs and logistics are the primary determinants of speed for the T&A sector.
- **Cost**: Includes various input costs ranging from labour and electricity to transportation and raw material costs.
- **Compliance and Risk**: Becoming increasingly more important especially around environmental and social compliance, and to a lesser extent corruption.

Source: Stakeholder Interviews

Note: \(^{1}\) Indicates only the essential elements that need to be addressed although other less critical dimensions exist.
Ethiopia’s competitiveness can be measured across these key metrics of cost, speed, quality, and compliance/risk relative to comparative countries.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Countries were selected based on location, competitiveness across metrics, and strength of T&amp;A sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality</strong></td>
<td></td>
</tr>
<tr>
<td>Q1 Extent of staff training (7 best, 1 worst)</td>
<td>Ethiopia 3.7</td>
</tr>
<tr>
<td>Q2 Capacity to attract talent (7 best, 1 worst)</td>
<td>Ethiopia 3.43</td>
</tr>
<tr>
<td>Q3 Quality of Management Schools (7 best, 1 worst)</td>
<td>Ethiopia 3.75</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
</tr>
<tr>
<td>S1 Time to Export – Border Compliance (days)</td>
<td>Ethiopia 5.3</td>
</tr>
<tr>
<td>S2 Time to Import – Border Compliance (days)</td>
<td>Ethiopia 17.2</td>
</tr>
<tr>
<td>S3 Average Market Line Efficiency</td>
<td>Ethiopia 46%</td>
</tr>
<tr>
<td>S4 Logistics Performance Index Score (6 best, 0 worst)</td>
<td>Ethiopia 2.38</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
</tr>
<tr>
<td>C1 Electricity Tariff (USD)</td>
<td>Ethiopia $0.05</td>
</tr>
<tr>
<td>C2 Cost of Export: Inland transport + customs (USD)</td>
<td>Ethiopia $1,870</td>
</tr>
<tr>
<td>C3 Cost of Import: Inland transport + customs (USD)</td>
<td>Ethiopia $5,470</td>
</tr>
<tr>
<td>C4 Average wage monthly rate (USD)</td>
<td>Ethiopia $40</td>
</tr>
<tr>
<td><strong>Compliance and Risk</strong></td>
<td></td>
</tr>
<tr>
<td>R1 Corruption Index Score (100 most, 0 least transp.)</td>
<td>Ethiopia 33</td>
</tr>
<tr>
<td>R2 Social protection/labour rating (6 best, 1 worst)</td>
<td>Ethiopia 3.5</td>
</tr>
<tr>
<td>R3 Environmental sustain. rating (6 best, 1 worst)</td>
<td>Ethiopia 4</td>
</tr>
<tr>
<td>R4 Business regulatory environment (6 best, 1 worst)</td>
<td>Ethiopia 3.5</td>
</tr>
</tbody>
</table>

Color indicate Ethiopia’s performance relative to other countries: Above Average, Average, Below Average.

## Quality

### Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Bangladesh</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of staff training (7 best, 1 worst)</td>
<td>3.7</td>
<td>4.2</td>
<td>3.8</td>
<td>3.21</td>
<td>4.6</td>
</tr>
<tr>
<td>Capacity to attract talent (7 best, 1 worst)</td>
<td>3.43</td>
<td>3.72</td>
<td>3.19</td>
<td>2.49</td>
<td>4.15</td>
</tr>
<tr>
<td>Quality of Management Schools (7 best, 1 worst)</td>
<td>3.75</td>
<td>4.35</td>
<td>3.23</td>
<td>3.69</td>
<td>4.44</td>
</tr>
</tbody>
</table>

### Current Competitiveness

- Ethiopia’s performance on quality, is overall average in comparison to benchmark countries
- It is especially lacking in the area of staff training, performing only slightly better than Bangladesh
- Ethiopia has instituted measures to attract expatriate staff in an effort to boost skilled labour. Although this has yielded some advantages, there are still challenges with knowledge transfer
- Challenges are especially more pronounced amongst local firms who do not have the infrastructure or the know-how to be able to consistently meet buyer quality standards

### Opportunities for Improvement

- Incentives to increase hiring of skilled staff and promotion of knowledge and technology transfer
- Improved standards of education (TVET and university education)
- Stronger links between industry and educational institutions
- Incentives to encourage and facilitate technology upgrading

Color indicate Ethiopia’s performance relative to other countries:
- **Above Average**
- **Average**
- **Below Average**

Ethiopia’s performance on speed is hampered by challenges faced in the customs and logistics processes.

### Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Time to Export – Border Compliance (days)</td>
<td>5.3</td>
<td>1.7</td>
<td>8</td>
<td>10.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Time to Import – Border Compliance (days)</td>
<td>17.2</td>
<td>11</td>
<td>26.8</td>
<td>13.6</td>
<td>10.1</td>
</tr>
<tr>
<td>Average Market Line Efficiency</td>
<td>46%</td>
<td>40%</td>
<td>-</td>
<td>40%</td>
<td>46%</td>
</tr>
<tr>
<td>Logistics Performance Index Score (6 best, 0 worst)</td>
<td>2.38</td>
<td>3.33</td>
<td>2.99</td>
<td>2.66</td>
<td>2.98</td>
</tr>
</tbody>
</table>

**Current Competitiveness**

- Speed of processing goods is primarily impacted by customs and logistics processing.
- The time it takes to import goods is high for Ethiopia compared to benchmark countries.
- The major bottlenecks are caused by the lengthy processes and inefficient processing.
- In contrast, average market line efficiency rates (a measure of the speed of production) are very comparable to benchmark countries. Stakeholders indicate that workers have the ability to reach target efficiency rates, however, the high rate of turnover (about 4% a month) undercuts this advantage.

**Opportunities for Improvement**

- Build infrastructure (both soft and hard) to improve customs and logistics processing.
- Improve efficiency of customs offices in the industrial parks.
- Introduce incentives to reduce turnover.
- Build housing around industrial parks to reduce turnover.
- Promote regular trainings especially around soft skills.
- Introduce sector specific wage rates.

Ethiopia is an attractive sourcing destination for buyers because of its cost advantages particularly around electricity and wages. However, cost of transport is high; transporting a 40-foot container from Ethiopia to the Port of Djibouti is estimated to be 2–4 times more expensive than other countries such as Bangladesh, Vietnam, and India.

Despite some of the cost advantages, countries like Bangladesh, India, Myanmar and Pakistan have large populations and low wages to rival the demographic attractions of Africa so it will take more than surplus labour to become competitive in the global market.

<table>
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<tr>
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<th>Bangladesh</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Electricity Tariff (USD)</td>
<td>$0.05</td>
<td>$0.22</td>
<td>$0.17</td>
<td>$0.09</td>
<td>$0.14</td>
</tr>
<tr>
<td>Cost of Export: Inland transport + customs (USD)</td>
<td>$1,870</td>
<td>$1,355</td>
<td>$1,435</td>
<td>$1,290</td>
<td>$830</td>
</tr>
<tr>
<td>Cost of Import: Inland transport + customs (USD)</td>
<td>$5,470</td>
<td>$3,185</td>
<td>$745</td>
<td>$1,380</td>
<td>$840</td>
</tr>
<tr>
<td>Average wage monthly rate (USD)</td>
<td>$40</td>
<td>$135</td>
<td>$90</td>
<td>$70</td>
<td>$145</td>
</tr>
</tbody>
</table>

Current Competitiveness:

- Ethiopia is an attractive sourcing destination for buyers because of its cost advantages particularly around electricity and wages.
- However, cost of transport is high; transporting a 40-foot container from Ethiopia to the Port of Djibouti is estimated to be 2–4 times more expensive than other countries such as Bangladesh, Vietnam, and India.
- Despite some of the cost advantages, countries like Bangladesh, India, Myanmar and Pakistan have large populations and low wages to rival the demographic attractions of Africa so it will take more than surplus labour to become competitive in the global market.

Opportunities for Improvement:

- Increase competitiveness and advance planning to ensure that transportation rates continue to drop.
- Introduce efficiencies in the process to reduce double handling and ultimately lower costs.
- Provide predictability into electricity tariff rate for the next 5–10 years.
- Ensure wage rates remain competitive even with the introduction of a minimum wage rate.

Color indicate Ethiopia’s performance relative to other countries:
- Above Average
- Average
- Below Average

Compliance and risk scores are average relative to benchmarks, but provide an opportunity for Ethiopia to differentiate itself

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Bangladesh</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corruption Index Score (100 most, 0 least transp.)</td>
<td>33</td>
<td>25</td>
<td>30</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>Social protection/labour rating (6 best, 1 worst)</td>
<td>3.5</td>
<td>3.5</td>
<td>4</td>
<td>3.5</td>
<td>-</td>
</tr>
<tr>
<td>Environmental sustain. rating (6 best, 1 worst)</td>
<td>4</td>
<td>3.5</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Business regulatory environment (6 best, 1 worst)</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

• Ethiopia’s performance is on par with benchmark countries on measures of compliance and risk; Ethiopia is performing slightly better on the environmental sustainability rating

• For countries such as Bangladesh, Cambodia, and Vietnam, compliance with the social and environmental requirements has proven to be very difficult as it requires retrofitting sustainable practices in to an existing industry

• As it’s building the industry Ethiopia has the ability to differentiate itself by prioritizing issues of social and environmental compliance

For Ethiopia to be competitive, it should aim to meet specific targets across relevant parameters

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target for Ethiopia</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extent of staff training (7 best, 1 worst)</td>
<td>4.5</td>
<td>Equivalent to China’s current status which is the highest rating amongst countries with strong T&amp;A export sectors</td>
</tr>
<tr>
<td>Capacity to attract talent (7 best, 1 worst)</td>
<td>5</td>
<td>Comparable to current rating for India, important to have a high target given that this is a key metric for quality</td>
</tr>
<tr>
<td>Quality of Management Schools (7 best, 1 worst)</td>
<td>4</td>
<td>Realistic goal for Ethiopia given that current rating is 3.75; Kenya’s rating is 4.35</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time to Export – Border Compliance (days)</td>
<td>4</td>
<td>Average number of days for strong textile export performers</td>
</tr>
<tr>
<td>Time to Import – Border Compliance (days)</td>
<td>9</td>
<td>50% reduction which is comparable to benchmark countries</td>
</tr>
<tr>
<td>Average Market Line Efficiency</td>
<td>45%</td>
<td>Current performance is strong but not consistent due to high turnover – need to ensure target is met consistently</td>
</tr>
<tr>
<td>Logistics Performance Index Score (6 best, 0 worst)</td>
<td>3.5</td>
<td>India has a score of 3.4 and was able to build a strong T&amp;A industry</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity Tariff (USD)</td>
<td>-</td>
<td>Performance is strong, Ethiopia should aim to remain competitive without going into a cost spiral</td>
</tr>
<tr>
<td>Cost of Export: Inland transport + customs (USD)</td>
<td>$900</td>
<td>50% reduction which is comparable to benchmark countries</td>
</tr>
<tr>
<td>Cost of Import: Inland transport + customs (USD)</td>
<td>$1500</td>
<td>Still high relative to benchmarks but is about a 70% reduction</td>
</tr>
<tr>
<td>Average wage monthly rate (USD)</td>
<td>-</td>
<td>Performance is strong, Ethiopia should aim to remain competitive without going into a cost spiral</td>
</tr>
<tr>
<td><strong>Compliance Risk</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption Index Score (100 most, 0 least transp.)</td>
<td>45</td>
<td>Higher target than China (one of best ranked benchmark countries) can be used as a differentiator</td>
</tr>
<tr>
<td>Social protection/labour rating (6 best, 1 worst)</td>
<td>4.5</td>
<td>High target in an effort to differentiate – no benchmark countries are at 4.5&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Environmental sustain. rating (6 best, 1 worst)</td>
<td>4.5</td>
<td>High target in an effort to differentiate – no benchmark countries are at 4.5&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Business regulatory environment (6 best, 1 worst)</td>
<td>5</td>
<td>High target in an effort to differentiate – no benchmark countries are at 5&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
The recommendations in this report map to various elements of competitiveness to help reach those targets (1/3)

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Banking</th>
<th>Local Workforce</th>
<th>Customs and Logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop credit guarantees and dedicated financing facilities</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Pilot allowing trade finance by foreign banks in Ips</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Reform the TVET system and create TVET-industry linkages</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Institute a human resource management body to handle line worker recruitment</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Establish a human resource development fund</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Set up worker service support centers</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Set a minimum wage for the sector</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Logistics competitiveness targets</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Allocate dedicated customs officers with knowledge of the T&amp;A sector</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Implement a customs management system with clear standards</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Incentivize local firms to develop 1) warehouses and 2) container parks</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
</tbody>
</table>
The recommendations in this report map to various elements of competitiveness to help reach those targets (2/3)

<table>
<thead>
<tr>
<th>Industrial Park Development</th>
<th>Local Capability Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop eco-industrial parks and ‘green’ existing parks</td>
<td>Provide extended support for star manufacturers</td>
</tr>
<tr>
<td>Develop a blueprint for integrated industrial planning</td>
<td>Develop guidelines around expat hire to promote knowledge transfer</td>
</tr>
<tr>
<td>Provide dedicated access to utilities (power, water, internet)</td>
<td>Develop regulations to guide and control sub-contracting practices</td>
</tr>
<tr>
<td></td>
<td>Build accessory input production</td>
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<td></td>
<td>Promote joint ventures in ginning and textiles</td>
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<td></td>
<td>Strengthen the quantity and quality of locally produced cotton</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
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</tbody>
</table>

General quality improvement
Reduces need to import
The recommendations in this report map to various elements of competitiveness to help reach those targets (3/3)

<table>
<thead>
<tr>
<th>Incentives</th>
<th>Investment Promotion</th>
<th>Institutional Arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce performance-based incentives</td>
<td>Prioritize development of basic products in the short term</td>
<td>Consider creating a joint taskforce between key supporting institutions</td>
</tr>
<tr>
<td>Develop incentives addressing operational challenges</td>
<td></td>
<td>Optimize collection and use of data at ETIDI, EIC, and MoTI</td>
</tr>
<tr>
<td>Ensure incentives are manufacturer-specific</td>
<td>Target both US and European buyers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase use of oversees government representation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce performance-based incentives</td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Develop incentives addressing operational challenges</td>
<td>✔</td>
<td>✔</td>
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</tr>
<tr>
<td>Ensure incentives are manufacturer-specific</td>
<td>General quality improvement</td>
<td>Reduces need to import</td>
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</tr>
<tr>
<td>Prioritize development of basic products in the short term</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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</tr>
<tr>
<td>Target both US and European buyers</td>
<td>General speed improvement</td>
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</tr>
<tr>
<td>Increase use of oversees government representation</td>
<td>Oversees government representation is intended to increase attractiveness of the Ethiopian market and will only indirectly address key parameters of performance</td>
<td></td>
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</tbody>
</table>

Performance-based incentives are intended to meet national targets, and will only indirectly address key parameters of performance

General quality improvement

General speed improvement

Oversees government representation is intended to increase attractiveness of the Ethiopian market and will only indirectly address key parameters of performance
A results framework can be used to measure how well Ethiopia is meeting its targets to achieve growth in sector

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Quality</th>
<th>Speed</th>
<th>Cost</th>
<th>Compliance/Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improved garment and apparel quality for export</td>
<td>• Improved time to export and import goods</td>
<td>• Consistent wage and electricity rates</td>
<td>• Strengthened environmental and social compliance metrics</td>
<td></td>
</tr>
<tr>
<td>• Availability of quality inputs (both fabrics and accessories) in country</td>
<td>• Consistent worker production and efficiency levels comparable</td>
<td>• Improved costs of customs clearing and logistics</td>
<td>• Improved regulatory business environment</td>
<td></td>
</tr>
</tbody>
</table>

GoE aims to lead the African textile and garment sector in global competitiveness by realizing a sustainable, diversified, and conducive business environment by 2025

### Sample performance indicators to be used

**Quality**
- Quality of T&A specific training institutions
- Percent of TVET and university graduates who are employed by industry each year
- Number of expat hires each year
- Percent of textiles mills and ginneries upgrading their equipment each year
- Number of local staff trained by expats to take over operations each year

**Speed**
- Total time (days) to import goods
- Total time (days) to export goods
- Number of days/month without interruptions in connectivity, water, or power within industrial parks
- Percent change in worker efficiency rates
- Percent change in worker retention rates

**Cost**
- Change in employee wage rate
- Change in electricity tariff's for each manufacturer
- Cost of in land transportation for exports and imports
- Shipping costs to final destination

**Compliance/Risk**
- Percent of industrial parks with zero-effluent discharge treatment facilities
- Percent of workers in IPs with access to housing
- Environmental sustainability rating
- Social protection/labour rating
- Ability to access regulatory information online
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector

Contents
1. Executive Summary
2. Global Apparel Market
   • Overview
   • Global Market Trend
   • GTVAC Ecosystem
   • Case Studies
3. Ethiopian Apparel Value Chain
   • Overview
   • Ethiopian TAVC Ecosystem
   • Ethiopian Value Chain Binding Constraints
     • Issue Areas Biding Constraints
     • Thematic Areas Binding Constraints
4. Recommendations and Road Map
   • Recommendations
     • Issue Area Recommendation
     • Thematic Area Recommendation
   • Competitive Assessment
   • Implementation Roadmap
## Preliminary Implementation Roadmap – Banking and Access to FX

<table>
<thead>
<tr>
<th>Activity</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>Responsible1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide dedicated financing facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DBE and EIC</td>
</tr>
<tr>
<td>Engage development partners and multilaterals</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work with local banks to structure facilities</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pilot (in IPs) joint trade financing services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NBE and EIC</td>
</tr>
<tr>
<td>Prepare terms of engagement with input manufacturers</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Identify and engage international banks for collaboration</td>
<td></td>
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<tr>
<td>Extend forex transaction privileges to indirect exporters outside of IPs</td>
<td></td>
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<td></td>
<td>NBE and MoR</td>
</tr>
<tr>
<td>Define terms that allow transactions in forex for input manufacturers</td>
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<tr>
<td>Collect data and use input/output coefficients to determine duty free imports</td>
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<tr>
<td>Collect data on goods sold locally versus exported by local input manufacturers</td>
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</tbody>
</table>

## Preliminary Implementation Roadmap – Workforce Development

<table>
<thead>
<tr>
<th>Activity</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform the TVET system</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>ETIDI</td>
</tr>
<tr>
<td>Introduce an apprenticeship program</td>
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<tr>
<td>Revise TVET curriculum for relevance</td>
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<tr>
<td>Rework admissions program to accommodate a wider range of trainees</td>
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<tr>
<td>Establish an industry-wide HR body</td>
<td></td>
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<td></td>
<td></td>
<td>MOLSA and ETIDI</td>
</tr>
<tr>
<td>Define scope and mandate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ETIDI</td>
</tr>
<tr>
<td>Hire staff to begin execution of the mandate</td>
<td></td>
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<td></td>
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<td>ETIDI</td>
</tr>
<tr>
<td>Create a human resource development fund</td>
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<td>ETIDI</td>
</tr>
<tr>
<td>Conduct discussions with firms to guide fund specifications</td>
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<td>ETIDI</td>
</tr>
<tr>
<td>Identify and approve partners to provide trainings</td>
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</tr>
<tr>
<td>Implement a process through which firms will apply for and receive training for their workers</td>
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<tr>
<td>Establish worker service support centers in IPs</td>
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<tr>
<td>Conduct surveys in parks to determine needs</td>
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<tr>
<td>Recruit and place personnel in parks across the country</td>
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<tr>
<td>Establish a minimum wage for the sector</td>
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<td>Conduct cost of living surveys to inform wage setting</td>
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<tr>
<td>Engage workers and employers to gather input</td>
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<td>Issue a directive on minimum wage and adjustment</td>
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<td>Review minimum wage periodically</td>
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1. Responsible columns indicate the agency or agencies responsible for the activity.
## Preliminary Implementation Roadmap – Customs and Logistics

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<td>Set logistics competitiveness targets</td>
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<td>Set high level targets</td>
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<td>Develop detailed implementation plan</td>
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<td><strong>Hire dedicated customs officers with T&amp;A specialty</strong></td>
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<td>Screen and hire customs officers</td>
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<td>Institute new working hours (24/7 in IPs)</td>
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<td>Provide refresher trainings every 6 months</td>
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<td><strong>Develop clear standards and procedures</strong></td>
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<td>Assess standards and develop manual</td>
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<td>Develop accountability mechanism</td>
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<td>Provide training on new standards²</td>
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<td><strong>Develop duty free zone to warehouse inputs</strong></td>
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<td>Institute policy change to allow zone to operate</td>
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<td>Select optimal location</td>
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<td>Develop zone infrastructure</td>
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<td><strong>Incentivize firms to develop container parks</strong></td>
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<td>Design incentives</td>
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<td>Identify firms and promote incentives</td>
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¹ Responsible: NLC, MoR, IPDC, EIC
# Preliminary Implementation Roadmap – Industrial Park Development

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<td>Set uniform targets and standards across IPs</td>
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<td>Promote and measure the use of materials</td>
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<td>Develop environmental management system</td>
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<td>Build necessary infrastructure</td>
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<td><strong>Develop ‘Eco-Industrial’ Parks</strong></td>
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<td>Adopt clear regulations specifying the design</td>
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<td>Build new eco-industrial parks</td>
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<td>Monitor and enforce standards</td>
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<td><strong>Develop Blueprint for Integrated Parks</strong></td>
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<td>Assess existing IPs and lessons learned</td>
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<td>Develop integrated design blueprints</td>
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<td>Design partnership structure to build infrast.</td>
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<td>Build necessary infrastructure around parks</td>
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1. MoR and MUDHo
2. IPDC and MEFCC
## Preliminary Implementation Roadmap – Local Capability Support (1/2)

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<td>Provide tailored support for star performers</td>
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<td>Develop technical/financial support package</td>
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<td>Develop selection criteria</td>
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<td>Select first wave of firms</td>
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<td>Provide ongoing support to selected firms</td>
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<td>Promote knowledge transfer</td>
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<td>Develop measures to guide expat hire</td>
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<td>Develop data collection mechanism</td>
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<td>Collect data - measure knowledge transfer</td>
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<td>Guide and control sub-contracting</td>
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<td>Develop regulations and standards</td>
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<td>Institute policy change to allow movement of goods</td>
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<tr>
<td>Develop clearance system for sub-contracting firms</td>
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<tr>
<td>Pilot sub-contracting system</td>
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## Preliminary Implementation Roadmap – Local Capability Support (2/2)

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<td>Bring expatriates to improve quality of input producers</td>
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<td>Identify needs in local firms</td>
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<tr>
<td>Engage international experts for their services</td>
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<td>Consider setting local sourcing quotas</td>
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<tr>
<td>Incentivize joint ventures in ginning and textiles</td>
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<tr>
<td>Design incentives for joint ventures²</td>
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<tr>
<td>Identify and engage local firms and international investors</td>
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<tr>
<td>Structure foreign investment in ginning to be accompanied by investment in cotton</td>
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<td>Gather industry input on amending regulation</td>
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<td>Amend regulation in alignment with industry players</td>
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<td>Reclassify ginning under manufacturing</td>
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<td>Revamp the existing research center for cotton</td>
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<td>Map out needs and required capabilities</td>
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<td>Invest in capacity building (training and personnel)</td>
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<td>Strengthen links between center and farmers/implementation</td>
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¹ Responsible parties: EIC, MoTI, ETIDI.
## Preliminary Implementation Roadmap – Incentives

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<td>Develop revised incentives structure</td>
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<td>Set national policy targets</td>
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<td>Design/approve performance-based incentives</td>
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<td>Design/approve manufacturer-specific incentives</td>
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<td>Design/approve incentives for operational challenges</td>
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<td>Develop target monitoring system</td>
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<td>Introduce new set of incentives²</td>
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<td>Measure whether incentives are meeting targets</td>
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<td><strong>Phase-out old incentives</strong></td>
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<td>Identify incentives to be phased-out</td>
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<td>Phase-out identified incentives</td>
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### Preliminary Implementation Roadmap – Investment Promotion

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<td>Design incentives²</td>
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<td>Communicate and promote incentives to firms²</td>
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<td><strong>Increase use of government representation</strong></td>
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<td>Increase participation in trade fairs</td>
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<td>Organize trainings of commercial attachés</td>
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<td>Work with overseas Ethiopian trade missions and embassies to arrange meetings with buyers</td>
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<td><strong>Use third party affiliations for visibility to buyers</strong></td>
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<td>Register with compliance auditing and certification bodies to certify parks</td>
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<td>Encourage Ethiopia-based firms to register with specialized platform groups for rating</td>
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¹ Responsible: EIC and IPDC
### Preliminary Implementation Roadmap – Institutional Arrangements

#### Institutional Arrangements

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<tr>
<td><strong>Develop joint taskforce</strong></td>
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<td>EIC and MoTI</td>
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<td>Assess gaps in existing structure</td>
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<td>Design joint taskforce</td>
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<td>Empower taskforce to implement decisions</td>
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<td>Implement new institutional structure</td>
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<td><strong>Optimize data collection</strong></td>
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<td>EIC and MoTI</td>
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<td>Invest in electronic data access</td>
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<td>Update relevant websites (regularly)</td>
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<td>Create a culture around data usage</td>
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<td>Collect data and use it for decision-making</td>
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<td>Assess impact of optimized data usage</td>
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Annexes*

1. Regional Market Analysis
2. Sustainability- Environmental, Social and Economic
3. Push/Pull Supply Chain
4. Disruptive Forces
5. Integration
6. Governance
7. Binding Constraints
8. Ancillary Services
9. Regional Benchmarking
10. Methodology

Note: [*] An annex document can be downloaded from the EIC website
Realizing New Productive Capacity in Ethiopia’s Textiles and Apparel Sector