Export substitution to leverage agribusiness, leather production and aviation services – what to learn from Ethiopia

Webinar on: Skills for Economic diversification in Central Africa: leveraging experiences from successful comparators and building partnerships (UNECA)

Nebiyeleul Gessese (PhD)
30 July 2020
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UNECA

Import Substitution to Leverage Agribusiness
what to learn from Ethiopia

Nebiyeleul Gessese (PhD)
30 July 2020
Import Substitution

- Narrowing Trade Deficit through increasing import substitution,
- Forcing the country to implement strict foreign exchange control measures and procedures in order to address country’s scarce foreign exchange.

There is a need to address the trade deficit not only on the income side (i.e. earnings from export), but also on the expenditure side (i.e. savings from import substitution) by identifying products that can be locally produced to reduce foreign exchange outflows/expenditure for imports.
Import substituting commodities should be selected based on the following benefits:

- Resource base
- Growth potential and competitiveness,
- Poverty reduction potential,
- Social benefits,
- Prospects of success, and
- Outreach
Import Substitution Requires Creation of Enabling Environment

To attract potential investors and pave the way for private investors, the government issued

- a liberalized investment code (Proclamation No. 37/1996), and
Investment Incentive Packages

The investment incentive packages in the Council of Ministers Regulation No. 84/2003 include the following:

- **100% Exemption from payment of Import customs duties**
  (all investment capital goods, such as plant and machinery, equipment etc)

- **Exemptions from payment of export customs duties**
  (products and services destined for export)

- **Income tax holiday**
  (new manufacturing and agro-industry investment or investment made in agriculture shall be exempted from the payment of income tax for a specified period.)

- **Exemption from payment of taxes on remittance:**
  Any remittance made by a foreign investor from the proceeds of the sale or transfer of shares or assets upon liquidation or winding up of an enterprise is exempted from the payment of any tax.
Agribusiness in Ethiopia
Agribusiness sector context

- Agriculture plays a central role in the Ethiopian economy, agro-industries accounted for only 5% of GDP because of inadequate and poor quality inputs,
- Ethiopia’s agro-exports are currently almost entirely limited to primary and unprocessed products, e.g. coffee, oilseeds, pulses, live animals etc.
- The share of processed products in total agro-industry exports constitute only 1.3% and import dependency remains strong,
- High post-harvest losses and higher prices.
Agribusiness sector context – Government Interventions

Three key overarching policy documents guide interventions in the sector over a 13-year period (2013-2025)

- the Industrial Development Roadmap (IDR), which provides a strategic framework for industrial development for the next ten years;
- the Industrial Development Strategic Plan (IDPS), which defines strategies, programmes and projects for the implementation of the IDR; and,
- the Industrial Development Institutional Setup (IDIS), which provides an institutional framework for industrial development.

Integrated agro-industrial parks in Ethiopia’s development (IAIP)
Plug – and – Play Facilities (17 Planned, 4 under implementation)
Integrated agro-industrial parks in Ethiopia (IAIP)

- Geographically clustered of independent firms grouped together to gain economies of scale and positive externalities by sharing infrastructure and taking advantage of opportunities for bulk purchasing and selling, training courses and extension services.
- Structured with modern infrastructure that includes, roads, power, water, communications, drainage, sewerage, a sewage treatment plant and an effluent treatment plant, among other infrastructure,
- Outfitted with Specialized infrastructure of cold storage units, quarantine facilities, quality control labs, quality certification centers, raw material storage and central processing centers, among other specialized infrastructure
- Served by a network of rural transformation centers which provide linkages to producers.
Rural transformation centers (RTC)

Integrated agro-industrial parks in Ethiopia’s development (IAIP)

Rural transformation centers (RTC)

- provides inputs and technical support to producers,
- facilities that provide integrated services to rural communities within a 100 kilometer radius of the proposed IAIP site.
- serve as a linkage to the IAIP in terms of raw material supply
Site selection process - Integrated agro-industrial parks in Ethiopia’s development (IAIP)

- **Agricultural production potential for strategic commodities**: availability and supply of raw materials – livestock, coffee, sesame, cereals, pulses, fruits and vegetables, and honey. Under this criterion, current and potential production, as well as the surplus of targeted commodities.

- **Inter-industry linkages and triggering effect**: capturing the potential linkages with existing industries that could trigger further industrial development.

- **Infrastructure facilities**: The presence of power, road network, water, railways, airport terminals and telecommunication infrastructure. Government fulfills infrastructural requirements.
Site selection process - Integrated agro-industrial parks in Ethiopia’s development (IAIP) … Cont’

- **Market potential:** A viable market for the products and services

- **Access to commercial and support services:** Commercial and support services such as universities, research centers, technical vocational education and training centers; farmers’ cooperatives and unions; and financial institutions

- **Concentration of enterprises and attractiveness for investors:** The existence of an industrial base and facilities such as import/export logistics, housing and social amenities
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Aviation Service
what to learn from Ethiopia

Nebiyeleul Gessese (PhD)
30 July 2020
ROUTE NETWORK

Destinations
- Ethiopian serves 107 international across 75 -> 120 targeted by 2025
- Ethiopian serves 23 domestic destinations

Capacity
1. 111 planes .... (The average age of the Ethiopian aircraft is just 5.4 years, compared to 13.5 for British Airways, 15 years for United Airlines and 10.7 for American Airlines)
2. Current -> accommodate 22 million passengers per year
3. The New Airport
   - 45 km from Addis Ababa to be connected by an Express-highway is on pipeline
   - Completion: in 4 years (31-Dec-2024)
   - Annual capacity: 120,000,000 Passengers per year
SERVICES PROVIDED BY THE ETHIOPIAN AIRLINES GROUP

- **Domestic and International Flights**
  (E-visa service to all international visitors, easing access for passengers with layovers to enter the country)
  - Africa - 62 Cities
  - Europe, North and South America - 22 Cities
  - Gulf, Middle East & Asia - 26 Cities
  - 23 domestic destinations: to Historical Heritage Routes and Natural Tourism destinations and commercial towns
SERVICES PROVIDED BY THE ETHIOPIAN AIRLINES GROUP …. CONT’

- **International Cargo Service**
  - Provides cargo service for import and export commodities, e.g. the growing floriculture and horticulture products,
  - Well developed Cargo terminal including cold chain facilities
  - Hub for services, e.g. COVID 19 medical tools from China to African countries, Brazil, WFP
SERVICES PROVIDED BY THE ETHIOPIAN AIRLINES GROUP … CONT’

- **Training**: Full-fledged training capacity … Ethiopian Aviation Academy offers
  - Training for Pilots, Aircraft Technicians, Cabin Crew (Service Trainee), Marketing & Sales as well as Management and Finance,
  - Basic pilot and aviation maintenance training to trainees from African countries
  - Simulator and basic training (both in-house and at the customer’s location)
SERVICES PROVIDED BY THE ETHIOPIAN AIRLINES GROUP …CONT’

- **Maintenance Service**
  - Certified maintenance facilities and crew for both Boeing and Airbus,
  - Maintenance Repair & Overhaul (MRO) business: engine, airframe and component maintenance contracts

- **Catering services**
  - Catering, and
  - a four-star hotel for transit passenger and passengers who want to stay in Addis Ababa for days
SERVICES PROVIDED BY THE ETHIOPIAN AIRLINES GROUP …CONT’

- **Aviation Services**
  - Owns and administers Addis Ababa International Airport and 23 Domestic Airports in Ethiopia
  - Undertakes development as well as expansion of airports
- **Established Hubs in Africa**
  - Zambian, Lusaka as an aviation hub for Southern Africa (The Government of Zambia will be the majority shareholder with 55% and Ethiopian will hold 45% in the airline.)
  - Ghana, Accra and the private sector have 51% while Ethiopian holds 49%
FACTORS THAT ENABLED THE AIRLINES GROUP TO BE EFFICIENT AND COMPETITIVE

- Very good short, medium and long term strategic plans with visionary leadership …. At present, the Group is implementing a 15 year strategic plan (following the preceding successful 15 year strategic plan)
- No government interferences in the business operations of the Group and the airline’s management is free to operate independently led by a Board of Management
- Invests in promoting Ethiopian culture and tourism.
  (The Group covers some budget for participants of trade fairs and tour operations)
Factors that Enabled the Airlines Group to be Efficient and Competitive … Cont’

- **Code-share arrangements** with Lufthansa, Brussels Airlines, Gulf Air and Air One,
- **Member of the Star Alliance Network**, an international airline network giving ... it access to more routes with partner airlines,
- Embarked on a major investment to transform its ICT to enable and drive the business. ICT capability is one of the differentiating factors of the Airlines Group,
- Committed to undertake and implement **International Standards**
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UNECA

Leather Production
what to learn from Ethiopia

Nebiyeleul Gessese (PhD)
30 July 2020
## Comparison of Livestock Population and RHS Productivity

### Bovine Hides

<table>
<thead>
<tr>
<th>Location</th>
<th>No of cattle (mln head)</th>
<th>Share of global herd (%)</th>
<th>Output of hides (mln pc)</th>
<th>Ratio of hide output to cattle head (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>1659.6</td>
<td>100</td>
<td>364.3</td>
<td>22.0</td>
</tr>
<tr>
<td>Africa</td>
<td>291.7</td>
<td>17.6</td>
<td>40.9</td>
<td>14.0</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>54.6</td>
<td>3.3</td>
<td>3.3</td>
<td>6.0</td>
</tr>
</tbody>
</table>

### Sheep Skins

<table>
<thead>
<tr>
<th>Location</th>
<th>No of sheep (mln head)</th>
<th>Share of global herd (%)</th>
<th>Output of skins (mln pcs)</th>
<th>Ratio of output to sheep head (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>1163.7</td>
<td>100</td>
<td>550.0</td>
<td>47.3</td>
</tr>
<tr>
<td>Africa</td>
<td>301.8</td>
<td>25.9</td>
<td>110.8</td>
<td>36.7</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>26.2</td>
<td>2.3</td>
<td>8.7</td>
<td>33.2</td>
</tr>
</tbody>
</table>

### Goat Skins

<table>
<thead>
<tr>
<th>Location</th>
<th>No of goats (mln head)</th>
<th>Share of global herd (%)</th>
<th>Output of skins (mln pcs)</th>
<th>Ratio of output to goat head (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>992.9</td>
<td>100</td>
<td>486.3</td>
<td>49.0</td>
</tr>
<tr>
<td>Africa</td>
<td>345.1</td>
<td>34.8</td>
<td>114.2</td>
<td>33.1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>24.7</td>
<td>2.5</td>
<td>8.1</td>
<td>32.8</td>
</tr>
</tbody>
</table>
The proportion of livestock under commercial ownership/ranching model is estimated to be less than 1%. Traceability and animal welfare issues are huge obstacles which need to be addressed through close knit collaboration between the Ministry of Agriculture and other relevant stakeholders.

Trading of live animals in key areas is driven by the demand of the export abattoirs who have in turn driven down the slaughter age as a result of consumer demand pressures. Younger animals being traded means limited usability of the skin and ultimately low product diversity and portfolio-this creates a limit on a firm’s ability to compete.

<table>
<thead>
<tr>
<th>Animal Holding Practices and Distribution Around the Country</th>
<th>Slaughter Practices (Export or Domestic)</th>
<th>Trade, Sales, Direct Procurement from Production Sources to Tanneries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small holder farmers (99.3%)</td>
<td>Export abattoirs (14)</td>
<td>Small scale collectors</td>
</tr>
<tr>
<td>Commercial farmers (0.7%)</td>
<td>Domestic abattoirs (250)</td>
<td>Medium/large collectors</td>
</tr>
<tr>
<td></td>
<td>Backyard slaughter</td>
<td>Traditional tanneries</td>
</tr>
<tr>
<td></td>
<td>Formal live animal trade</td>
<td></td>
</tr>
</tbody>
</table>

The raw hide and skin (RHS) trading overview includes:

- Animal husbandry:
  - Animal holding practices and distribution around the country.
- Production:
  - Slaughter practices (export or domestic).
  - Collection and delivery of RHS.
- Trading:
  - Trade, sales, direct procurement from production sources to tanneries.

Informal live animal trading includes:

- Small holder farmers (99.3%)
- Commercial farmers (0.7%)
- Export abattoirs (14)
- Domestic abattoirs (250)
- Backyard slaughter
- Formal live animal trade
- Small scale collectors
- Medium/large collectors
- Traditional tanneries
Animal Husbandry

There are 4 major animal husbandry challenges which have a direct impact on RHS as an input for the leather industry

1. Systems of raising livestock
2. Disease Prevalence and Management
3. Transportation and handling
4. Traceability
Raw Hide and Skin Production and Supply

4 - Common slaughter methods

1. Backyard slaughter
2. Rural Slaughter Slab Operation
3. Domestic Abattoir
4. Export Abattoir
In 2016/17, approximately 80% of RHS (of which 8% and 92% was hides and skins respectively) received by tanneries were obtained from household backyards indicating considerable defects and consequent high cost of operation to tanneries.

In terms of skin supply, export abattoirs offer best skins typically obtained fresh, despite small share of contribution.
Key Steps Involved in Trading RHS

Production → Collection → Storing & Preservation → Semi-processing (wholesale) → Collection → Tannery

Current RHS supply routes

- Formal: 15%
- Informal: 85%
Landscape – Tanneris

Current Breakdown of Investment
- Joint Venture (JV) 3%
- Foreign Direct Investment (FDI) 45%
- Domestic Investment (DI) 52%

- Total of 33 registered tanneries, of which 24 are currently operational
- 14 are FDI and 19 are DI
- Of the total daily capacity of 1 million sq. ft. of fished leather about 60% comes from FDIs
- FDIs focus more on skin than hides
Tanning Process – Finished Leather

Input
- RHS
- Chemicals
- Water
- Energy
- Fresh Air

Processing

Output
- Products
  - Wet-tanned
  - Crust
  - Finished Leather
- Effluent
  - For treatment
- Air Pollution
- Solid Waste
  - Processing
  - Disposal
Transitions in the Ethiopian Tanning Sector Regulations

1973
Government managed corporation established

1986
RHS traders invested in tanning industries

2008
Tanneries started making crust

2012
Tanners transformed to the export of finished leather

Formal RHS grade based export transaction started

RHS export banned

150% restrictive tax on raw hides and skins, pickles and wet-blue

Restrictive tax (150%) on all semi processed
## Estimated/Potential RHS Production and Tanneries Capacity

<table>
<thead>
<tr>
<th></th>
<th>Annual estimated Raw Hide mln pcs</th>
<th>Annual estimated Raw Skin mln pcs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated production with minimum kill rate</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Realized Recovery (2016/17)</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Tanneries installed soaking capacity</td>
<td>4</td>
<td>46</td>
</tr>
</tbody>
</table>
Product Manufacturing - Leather Goods

Input
- Finished leather
- Accessories
- Components
- Energy

Processing

Output
- Products
  - Footwear
  - Garments
  - Goods
- Effluent
  - For treatment
- Solid Waste
  - Processing
  - Disposal
Constraints in the Ethiopian - *Leather Sector*

- Environment and Sustainability
- Compliance to International Standards
- Export and Investments
- Finance and Incentives
- Institutional Coordination
- Customs and Logistics
- Workforce Development and Sustainability
## Policy and/or Technical Interventions undertaken and envisaged — Leather Sector

**Inputs supply (RHS, Chemical, Accessories etc.)**

<table>
<thead>
<tr>
<th>Policy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduce floor price mechanism for RHS at production and collection level to incentivize better collection rate</td>
<td>• Optimize utilization of existing abattoirs and encouraging modern/commercialized farms and abattoirs via new investment following the directive already approved by the Ethiopian investment board</td>
</tr>
<tr>
<td>• Improve RHS management and inspection system</td>
<td>• Develop pre-tanning process or pickling plant — by abattoirs, traders or tanners</td>
</tr>
<tr>
<td>• Introduce Restricted Substance Lists (RSL) for leather manufacturers</td>
<td></td>
</tr>
<tr>
<td>• Enable existing FDI footwear factories to supply the domestic market with accessories and components and provide product development services.</td>
<td>• Focusing on animal health and handling</td>
</tr>
</tbody>
</table>
### Policy and/or Technical Interventions undertaken and envisaged – Leather Sector … Cont’

#### Production Process

<table>
<thead>
<tr>
<th>Policy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>• LIDI driving research and product development with incentive mechanism established within LIDI to encourage proactive support</td>
<td>• Put in place a process control guideline/training system based on LWG standards so that tanners conform to specifications</td>
</tr>
<tr>
<td>• Incentivize R&amp;D and technical laboratory set-up at the tannery and leather product factory premises</td>
<td>• Encourage the principle of PPM (Planned Preventative Maintenance) through private service providers and consultants</td>
</tr>
<tr>
<td>• Ensure the enforcement of standards such as Leather Working Group (LWG) Environmental Audit Protocol, Zero Discharge of Hazardous Chemical (ZDHC) Certification, and Restricted Subsistence List (RSL) certification which are key compliance requirements globally</td>
<td>International expert support to ensure that the tanneries and factories are run as per international business standards</td>
</tr>
</tbody>
</table>
### Marketing

<table>
<thead>
<tr>
<th>Policy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Build business network through experienced marketers and create a digital presence for easy access</td>
</tr>
</tbody>
</table>

### Export and Investment

<table>
<thead>
<tr>
<th>Policy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enable domestic tanneries with indirect exports to access USD</td>
<td>• Targeting international brands and manufacturers for increased export and induce new investment in Ethiopia</td>
</tr>
<tr>
<td></td>
<td>• Investment promotion via Industrial Parks</td>
</tr>
</tbody>
</table>
### Policy and/or Technical Interventions - Leather Sector ... Cont’

#### Environment

<table>
<thead>
<tr>
<th>Policy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increased and systematic checks of tanneries for installing primary and secondary treatment plant.</td>
<td>• Finalize the Modjo Common Effluent Treatment Plan (CETP) plant construction</td>
</tr>
<tr>
<td>• Put in place a standard guide for responsible water usage</td>
<td></td>
</tr>
</tbody>
</table>

#### Incentives, Coordination, Logistics, and Customs

<table>
<thead>
<tr>
<th>Policy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduce performance based new incentives for value addition and improve management of existing incentive mechanisms</td>
<td></td>
</tr>
<tr>
<td>• Create a joint taskforce between key supporting institutions to serve as a central coordinating body to drive necessary change</td>
<td></td>
</tr>
<tr>
<td>• Set logistic competitiveness target</td>
<td></td>
</tr>
</tbody>
</table>
### Workforce Development

<table>
<thead>
<tr>
<th>Policy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Establish a human resource development fund to support with worker training in both soft and hard skills</td>
<td>• Set-up worker service support centers to improve retention and address worker unrest related issues</td>
</tr>
<tr>
<td>• Workers health and safety procedures and guidelines development and enforcement</td>
<td></td>
</tr>
</tbody>
</table>

Policy and/or Technical Interventions - Leather Sector … Cont’