

National Green Export Review of Ethiopia: Leather and Sesame Seeds



ETHIOPIA



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Abbreviations

ADLI	Agriculture Development Led Industrialization	LLPTI	Leather and Leather Products Technology
AGOA	Africa Growth and Opportunity Act of the	MOA	Ministry of Agriculture
	United States of America	MOI	Ministry of Industry
CSA	Central Statistics Agency	MOT	Ministry of Trade
DFQF	Duty Free and Quota Free (market access)	NEPAD	New Partnership For Africa's Development
EBA	Everything But Arms Initiative of the		(of the African Union)
	European Union	NGER	National Green Export Review
ECX	Ethiopian Commodity Exchange	RCA	revealed comparative advantage
EIA	environmental impact assessment	RHS	raw skins and hides
ELIA	Ethiopia Leather Industry Association	SAP	structural adjustment program
ERCA	Ethiopian Revenues and Customs Authority	SDGs	Sustainable Development Goals
FAO	Food and Agriculture Association	SSA	Sub-Saharan African
FDRE	Federal Democratic Republic of Ethiopia	SWOT	strengths, weaknesses, opportunities and
FLP	finished leather products		threats (analysis)
GDP	gross domestic product	UNCTA	D United Nations Conference on
GTP-II	Growth and Transformation Plan ()		Development and Trade
IMF	International Monetary Fund	USAID	United States Agency for International
ITC	International Trade Centre		Development
LIDI	Leather Industry Development Institute	WTO	World Trade Organization

Note

The dollar sign (\$) refers to United States dollars.

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EXECUTIVE SUMMARY AND INTRODUCTION

Country profile

A favourable climate, water resources, fertile soils, extensive areas of arable land and high population in rural areas all contribute to making Ethiopia an agrarian country. Agriculture is the mainstay of the national economy counting for around 41.4 per cent of GDP, 89 per cent of total exports and 80 per cent of all employment. Various agro-ecological zones sustain a variety of agricultural exports including: coffee, oil seeds, pulses, flowers, leather and leather products, live animals, meat, fruits and vegetables, textiles, natural gum and spices.

Ethiopia is in accession to be a member of the World Trade Organization (WTO) and is a member of a regional trade group, the Common Market for Eastern and Southern Africa (COMESA) which comprises a market of over 420 million people. Ethiopia also enjoys favourable treatment in major world markets with Duty Free and Quota Free (DFQF) privileges extended by, among others, the United Sates of America under the Africa Growth and Opportunity Act (AGOA); the European Union under the Everything But Arms Initiative (EBA); China through its 'Zero Tariff' scheme; and India which offers substantial DFQF market access. These market access privileges provide Ethiopian exporters with a competitive edge for their products compared to those outside of such schemes, encouraging investors engaged in the agriculture and agro-processing export sector to build production and export capacity in those products where Ethiopia has a natural competitive advantage.

The country has experienced strong and sustainable economic growth path over the last thirteen years, averaging above 10 per cent per year from 2003/04–2014/15 which is more than the average of Sub-Sahara Africa countries' growth rate – about 5.4 per cent – over the same period. Expansion of the services and agricultural sectors accounts for most of the growth, while manufacturing sector performance was relatively modest. To help expand manufacturing activity, the Government is currently implementing the second phase of its Growth and Transformation Plan (GTP-II) which aims to transform the country into a manufacturing hub by 2020.

This report

Applied to the full set of Ethiopia's export data (all exported goods), UNCTAD's Green Product Space methodology¹ was used to quantitatively identify highly competitive green products for which Ethiopia has a revealed comparative advantage in production and export. Coffee, sesame seeds, leather, spices, pepper, cut flowers and bamboo products were identified accordingly. Subsequently, discussions among national stakeholders in national workshops in 2015 and 2017 concluded that the National Green Export Review (NGER) project of Ethiopia should focus on two of these products, specifically green products produced in the 1) leather and leather products sector and 2) the sesame seed sector. Stakeholders considered increased production and export of green products from these sectors would represent the highest market potential in terms of export sales; result in the greatest improvement of local environmental conditions; and would also generate the highest number of new jobs, particularly for the rural poor, women and youth. Accordingly, this report focuses on these two sectors.

The leather sector

The leather and leather products industry has multiple linkages to the wider rural economy. It is also highly labour intensive in its raw material sourcing, transportation, processing and marketing phases. The industry thus possesses enormous potential to create much needed non-agricultural employment, and looks set to play an important role in poverty reduction. Yet this potential has remained largely unexploited. It is beset with far reaching structural problems unique to the leather sector, ranging from unorganized hide and skin collection systems upstream to poor marketing infrastructure downstream. It is not easy for the sector to achieve significant growth without properly addressing these deep rooted problems.

As described in the GTP-II plan, the leather and leather products sector contributes on average about 6-8 per cent of the gross value product of all manufacturing industries. Moreover, according to the same source, the sector contributes about 6 per cent to national GDP and the export of leather products continues to be an important source of foreign currency earnings. In the fiscal year of 2015, records indicate that 22,673 both permanent and temporary jobs have been created in the leather sector. Of this figure, 11,598 are female workers and the remaining 11,075 are male employees. These figures exceed the Government's forecasted target of creating 16,726 new jobs.

The sesame sector

Sesame is the most ancient oil crop adapted to tropic and semi-tropic areas around the world. For Ethiopia, it is the second most important agricultural commodity after coffee in foreign exchange earnings (FAO 2012). However, sesame production in most areas is carried out under traditional production systems associated with low production and productivity of the crop levels.

Ethiopia is one of the main sesame growing and exporting countries in Africa. It has high quality sesame seed varieties suitable for a wide range of applications. Sesame is produced in different areas in Ethiopia. It grows as a major crop in Tigray and Amhara, and in some areas in the Oromia, Beni-shangul Afar and Southern Nations, Nationalities and People. Types of Ethiopian sesame are the Whitish Humera type which enjoys strong demand in world markets, and the darker brown Wellega type for which foreign demand remains high but is lower than Humera type sesame demand.

Key findings

This report reviews global trends in the leather and sesame sectors, their role to the national economy, and Ethiopia's export policy framework, performance, and competitiveness in these sectors. In addition, the report also presents SWOT analysis that indicates remaining challenges and barriers that constrain performance in these sectors.

Major findings on the leather sector:

- ♦ Ethiopia has a growing absolute advantage in livestock production.
- There has been a fluctuating trend in export growth of the leather sector, globally and in Ethiopia. In Ethiopia fluctuations arise in association with supply and quality issues, lack of manpower skills, and unavailability of needed inputs such as chemicals, hides and skins.
- China is the major importer of raw hides and skins and major exporter of footwear and leather articles, and it currently is the world's largest leather products exporter.
- The major market destinations of raw hides and skins are Italy, China, and Hong Kong, China. Whereas the United States, Germany and Italy are the top destinations for the export of finished leather products and footwear.
- The share of Ethiopia's raw hides and skins exports in total exports is substantial whereas the share of leather articles and footwear remains small.
- Revealed Comparative Advantage (RCA) analysis shows that Ethiopia has a large comparative advantage in the export of raw hides and skins but not in the export of finished leather products.

Major findings on the sesame sector:

- Sesame seed is mainly produced in Asia and Africa which together account for about 95 per cent of the global production.
- There were more than 180 countries which participated in world sesame trade during the period 2006-2015 (both suppliers and importers).
- Ethiopia is among the top producers and suppliers of sesame seed in the world market.
- There has been a fluctuating trend in sesame export growth due to its high dependence on variable rainfall and price volatility in the global market.

- ♦ China, Israel and Turkey are the top importing partners of Ethiopia.
- In Ethiopia the sesame seeds (raw-sesame) account for most all sectoral exports with only an insignificant amount of processed sesame exports. Surprisingly, Ethiopia is a net importer of processed sesame products.
- Sesame seed exports have been contributing a double digit share to Ethiopia's total agricultural product exports.
- Ethiopia has significantly large comparative advantage in the export of sesame seeds, but it has not yet utilized this advantage to support its success as a competitive producer and exporter of processed sesame products.

General SWOT analysis for both sectors:								
Strengths	Weaknesses							
 Relatively large supply capacity of unprocessed goods. Presence of different varieties. Highly employment oriented sectors. Strong Government support to improve productivity. Presence of conducive policy and strategy frameworks. 	 Inadaquate processing and value addition. Limited skills for value-added processing in labour pool; training required. Poor marketing capability of producers. Shortage of working capital. Lack of investors in value added processing. 							
Opportunities	Threats							
Value addition and diversification.	Fluctuation of power supply.							

Section 1: Ethiopia's Leather Sector

1.1 Productive capacity of leather sector

The leather sector is identified as one of the potential sectors that could play a crucial role in achieving longrun policy objectives and transforming the country's development status to a higher level by increasing the foreign currency earning of the country, expanding employment opportunities and attracting foreign direct investment (FDI). This is based on the fact that Ethiopia is Africa's leading livestock producer and the 10th largest livestock producer in the world. It is not only about the sheer number of cattle, sheep and goats, but also that Ethiopian goat and sheep skins are preferable to other countries' products in terms of quality.²

As presented in Table 1.1 below, Ethiopia's population of cattle, sheep and goat increased by about 15 million, 6 million and 9 million from 2005 to 2014 respectively – increases of roughly 25 to 50 per cent. Similarly, it is also shown that the share of Ethiopia's population of cattle, sheep and goat increased from about 16.77

Figure 1. Continental and Ethiopia livestock population



Table 1.1: Livestock population of Ethiopia, 2005–2014 (thousands)

		2005	2006	2007	2008	2009					
	Ethiopia	40 390	43 125	47 571	49 298	49 884	50 382	53 382	53 990	54 000	55 694
Cattle	Africa	240 827	246 139	254 375	268 514	269 529	272 629	283 199	288 262	291 267	295 646
	Share	16.77	17.52	18.70	18.36	18.51	18.48	18.85	18.73	18.54	18.84
	Ethiopia	20 734	23 633	26 117	26 117	25 980	25 509	24 221	25 489	26 500	26 537
Sheep	Africa	251 253	255 901	269 875	272 799	278 484	287 338	291 974	297 538	302 319	305 687
	Share	8.25	9.24	9.68	9.57	9.33	8.88	8.30	8.57	8.77	8.68
	Ethiopia	16 364	18 560	21 709	21 799	21 961	22 787	22 613	24 061	25 000	25 035
Goat	Africa	274 131	275 958	301 895	313 779	317 290	324 372	332 593	339 366	345 778	350 224
	Share	5.97	6.73	7.19	6.95	6.92	7.02	6.80	7.09	7.23	7.15

Source: FAOSTAT

per cent, 8.25 per cent and 5.97 per cent in 2005 to about 18.84 per cent, 8.68 per cent and 7.15 per cent in 2014 respectively. As the share of these populations to total African livestock population is very significant there is a potential and possible strength for the country to source domestically produced hides and skins as an input for the domestic manufacturers in the leather sector. Access to domestic inputs would play a vital role in boosting the export performance of the country thereby contributing to the country's economic growth.

In addition to the numerical advantage of cattle, sheep and goats which make the country one of the most livestock-populous in the world, another promising trend is that the these populations are growing significantly. As presented in Figure 1, the trend shows an increase from around 40 million cattle, 20 million sheep and 16 million sheep in 2005 to above 55 million cattle, 26 million sheep and 25 million goats in 2014. This can be considered as enabling encouraging opportunities for the leather and leather products sector.

Africa's abundance of livestock translates into a natural strength of the leather sector since it is a direct by-product of the meat industry. Africa has about 15

per cent of the world's cattle population, a percentage that grew by about a quarter over the last decade. According to data taken from the FAO compendium (2014),³ strong growth of livestock output in Africa in general, and Ethiopia specifically, is making the continent a major future market for sourcing quality leather and hides for the booming global leather industry. For Ethiopia, alongside livestock, leather has been at the core of Ethiopia's economy for many centuries. The country is known for its high quality hides and skins. As livestock are predominantly owned by smallholder farmers and pastoralists, considerable livelihood gains are expected to accrue to rural populations going forward.

1.2 Institutional and legal framework for leather sector

The Government has established rules and regulations to help ensure sutainable production of leather and leather products in Ethiopia. Key regulatory instruments affecting the leather sector are presented in Table 1.2.

To enhance production and export levels of finished leather products the Government provides distinct

Table 1.2: List of rules and regulations a	ffecting the leather sector in general
Regulations affecting the sector	Description of the regulation
Article 43of the FDRE Constitution	The concept of sustainable development and the environmental rights of the people are protected.
Article 44 of the FDRE Constitution	All persons have the right to a clean and healthy environment.
Article 92 of the FDRE Constitution	The Government shall endeavour to ensure that all Ethiopians live in a clean and healthy environment, the design and implementation of programs shall not damage or destroy the environment.
Environmental Policy of Ethiopia ⁴ (approved in 1997)	Improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of resources and the environment.
Ethiopia's Climate Resilient Green Economy Strategy (adopted in 2011)	Promotes environmental protection and reducing fossil fuel consumption which releases greenhouse gases into the atmosphere.
Establishment of Environmental Protection Organs: Proclamation No. 295/2002	Establishes the organizational requirements and identifies the need to establish a system that enables coordinated but different responsibilities of environmental protection agencies at federal and regional levels.
Environmental Impact Assessment (EIA): Proclamation No.299/2002	The primary aim of this Proclamation is to make EIA mandatory for specified categories of activities undertaken either by the public or private sectors.
Environmental Pollution Control: Proclamation No. 300/2002	Primarily aims to ensure the right of citizens to a healthy environment and to impose obligations to protect the environment of the country.
Solid Waste Management: Proclamation no. 513/2007	Aims to promote community participation in order to prevent adverse effects and enhance benefits resulting from solid waste management.
Liquid Waste Management:	Aims to promote community participation in order to prevent adverse effects and enhance benefits resulting from liquid waste management.

incentives and facilitation services, while imposing a 150 per cent tax on hide and skins exports (i.e., without added value). However, the export of live animals is permitted and this is one of the causes for the shortage of hides and skins for Ethiopian tanneries.

A textile and leather industry development centre was established by the Government in 2006, and upgraded to Leather Industry Development Institute (LIDI) to provide technical support and consultancy services for potential investors in the sector and to create an atmosphere conducive to the development of linkages among stakeholders in the supply chain.

The Environmental Protection Agency has been authorized to set effluent discharge standards and to regulate discharge to land, water and air. The Cleaner Production Centre of the Science and Technology Commission has been involved in developing the regulations. All tanneries are required to install effluent treatment plants.

Ethiopia is in accession to become a member of the world trading system, World Trade Organization (WTO), and is a member of a regional trade group, The Common Market for Eastern and Southern Africa (COMESA) where the country made a 10 per cent tariff reduction for import from all member countries. Currently the sector is open to foreign investors which implies that even when the country become a member of WTO, the sector will probably remain much more un affected with the flow of investment.

A potential threat will arise when substitute products are imported and sold at a lower price relative to the domestic produced leather goods which will make the working environment very challenging. Since the importance of non-tariff measures like quotas and bans is negligible in the WTO system where tariffication (changing non-tariff measures into tariffs) is more fundamental, it will be difficult for Ethiopia to use trade policy to protect domestic infant industries in the sector.

The labour proclamation number 377/2003 clearly articulated all the issues regarding labour rules and regulations of the country including the obligations of both parties (employer and employee). The following are among the prominent rules regarding the relationship between workers and employers of any sector in Ethiopia.

 The employer is obliged to pay the worker wages and other emoluments in accordance with this proclamation or the collective agreements, to respect the workers human dignity, to take all the necessary occupational safety and health measures and to abide by the standards and directives of appropriate authorities in respect of those measures.

- Normal hours⁵ of work shall not exceed eight hours a day or a maximum of forty-eight hours in a week
- Work done in excess of the normal daily working hours fixed in accordance with the provision of this proclamation should be deemed to be overtime.
- A worker should be entitled to a weekly rest period consisting of not less than twenty four uninterrupted hours in the course of each period of seven days.

Also, a worker is entitled to uninterrupted annual leave with pay which shall in no case be less than fourteen working days for the first one year service and fourteen working days plus one working day for every additional one year service.

1.3 The global market for leather products

Leather and leather products are among the most widely traded and universally used commodities in the world. As reflected in the study of Mulat (2015),⁶ the total value of annual trade is estimated at 1.5 times that of meat trade; more than five times that of coffee and more than eight times that of rice. Formal international trade in leather and leather products is estimated at over \$50 billion a year and the market is far from saturated. In the next decade, the demand for leather raw materials (hides) and leather products may exceed supply, raising prices and making the leather industry one of the most lucrative business sectors in the years to come. The global export trend of leather and leather products are presented in the following Table 1.3.

The time series data from 2006 - 2015 taken from the International Trade Centre (ITC) database is analysed to present the global trend of the export value of leather products. Leather sector exports have grown on average of about 6.56 per cent (raw hides and skins grows by 2.20 per cent, leather articles grows by 8.18 per cent and footwear grows by 7.3 per cent on average) for the last ten years with minor annual variations. Leather products registered negative growth which is about 14.68 per cent and 6.31 per cent in 2009 and 2015 respectively. In contrast, the export of leather products has registered a positive

Table 1.3: Global export trend of leather sector (billions of \$)											
Year	RHS	Growth	Leather articles ⁷	Growth	Footwear	Growth	Sector total	Growth			
2006	29.09	-	38.64	-	73.69	-	141.42	-			
2007	31.53	8.38	44.42	14.96	82.84	12.42	158.80	12.28			
2008	29.06	-7.84	49.75	12.01	92.09	11.16	170.90	7.63			
2009	20.81	-28.40	42.97	-13.64	82.04	-10.91	145.81	-14.68			
2010	30.18	45.04	51.82	20.59	96.68	17.85	178.68	22.54			
2011	32.61	8.05	65.70	26.79	114.19	18.10	212.49	18.92			
2012	31.91	-2.12	68.71	4.59	117.67	3.05	218.30	2.73			
2013	35.63	11.65	74.56	8.51	128.98	9.61	239.16	9.56			
2014	36.37	2.07	76.23	2.25	141.80	9.94	254.40	6.37			
2015	30.17	-17.04	74.39	-2.41	133.78	-5.65	238.34	-6.31			
Average	30.74	2.20	58.72	8.18	106.38	7.29	195.83	6.56			

Source: ITC data

growth of about 22.54 per cent and 18.92 per cent in 2010 and 2011 consecutively. More specifically:

- The global export of raw hides and skins has grown on average of 2.2 per cent each year from 2006-2015. The growth of the raw hides and skins has been fluctuating from about -28.39 per cent to 45.03 per cent.
- The global export of leather articles has grown on average of 8.18 per cent each year from 2006-2015. The growth of leather articles has been also fluctuating from about -13.64 per cent to 26.79 per cent.



• The global export of footwear has grown on average of 7.3 per cent each year from 2006-2015. The growth of footwear has been also fluctuating from about -10.91 per cent to 18.10 per cent.

Figure 2 shows that the global export trend of the leather sector is increasing for the years under analysis. As discussed above, the leather sector global trend shows to some extent instabilities where the growth is both declining and increasing in some years. For instance; the growth has declined in 2009 and 2015. The countries that are the main players of the leather sector in the global trade are presented below. These export values are shown alongside production quantities in Figure 3.

As shown in Table 1.4, over the past decade, on average around \$30 billion and \$165 billion has been earned annually by the exporters of the raw hides and skins and leather and leather articles respectively. About 45 per cent of the global supply of raw hides and skins are supplied/exported by the world's top five major exporters (Italy, the United States, Germany, Brazil, and Hong Kong, China). Italy, the leading exporter of raw hides and skins supplied about 16.22 per cent of world exports. The United States and Hong Kong, China being the second and third largest exporters of raw hides and skins exported around 10 per cent and 8 per cent respectively to the world market.

The world top three exporters of leather and leather products (China, Italy and Hong Kong, China) exported about 55 per cent of world exports. Only China, the leading exporter exported 37.35 per cent to the world. China is the major importer of raw hides and skins

Raw hides and skins (rhs)		Average export	Leather and lea	ather products	Average export
Major exporter	Average share	(thousands of \$)	Major exporters	Average share	(thousands of \$)
World	100	3 0735 508	World	100.00	165 095 251
Italy	16.22	4 985 497	China	37.35	61 665 280
United States	10.01	3 075 890	Italy	10.47	17 280 204
Hong Kong (China)	8.01	2 461 697	Hong Kong (China)	6.87	11 349 733
Brazil	6.74	2 070 428	Viet Nam	4.87	8 042 795
Germany	4.06	1 247 082	France	4.76	7 858 938
Australia	3.14	964 715	Germany	3.80	6 267 013
India	3.13	962 320	Belgium	3.30	5 450 820
Argentina	2.90	891 914	India	2.32	3 831 242
Republic of Korea	2.85	875 026	Spain	2.28	3 763 236
Nigeria	2.73	838 214	Netherlands	2.20	3 632 688
Ethiopia	0.29	87 931	Ethiopia	0.01	17 909

Table 1.4: Major world exporters of the RHS and leather products average share, 2006–2015

Source: ITC data

and in turn exports leather and leather products after adding value to the raw hides. This makes China the main actor in the leather sector.

As shown in Table 1.5, the world's leading importers of raw hides and skins are China, Italy and Hong Kong, China with an annual average 22.2 per cent, 13.22 per cent and 10.69 per cent respectively for the last ten years. As discussed in the above section, Italy and Hong Kong, China were also among the major exporters/suppliers of raw hides and skins. Whereas, the United States, Germany and Japan are the main importers of leather and leather products with an annual average world import share of 20.77 per cent, 7.22 per cent and 6.19 per cent respectively.

1.4 The leather sector of Ethiopia

The Ethiopian leather industry is a relatively older industry with more than 80 years of involvement in processing leather and producing leather products. Indeed Ethiopia possesses one of the world largest livestock populations. This enormous population of livestock provides ample opportunity for the development of the leather industry in the country. However, the livestock potential remains lagging behind in its role to hasten the country's economic development. Lack of effective, efficient and coordinated support in terms of supply of raw hides, skins and other production inputs as well as other related problems are among the challenges faced to achieve the target.

Table 1.5: Major world importers of the RHS and leather products average share, 2006–2015

Raw hides and skins		Average import	Leather and leather products		Average import
Major importers	Average share	(thousands of \$)	Major importers	Average share	(thousands of \$)
World	100.00	29 422 050	World	100.00	167 713 198
China	22.20	6 532 876	United States	20.77	34 827 552
Italy	13.22	3 889 842	Germany	7.22	12 108 920
Hong Kong (China)	10.69	3 145 004	Japan	6.19	10 375 777
Germany	3.73	1 098 217	Hong Kong (China)	6.05	10 141 632
Viet Nam	3.70	1 087 995	France	5.96	9 993 696
Republic of Korea	3.00	883 304	United Kingdom	5.59	9 381 216
Mexico	2.78	816 985	Italy	5.23	8 770 786
Spain	2.53	744 462	Spain	2.64	4 431 583
United States	2.47	727 215	Netherlands	2.53	4 243 345
Romania	2.44	718 353	Belgium	2.45	4 109 672
Ethiopia	0.02	6 454	Ethiopia	0.05	78 256.6

Source: ITC data



The Ethiopian leather sector is composed of raw hides and skins traders, leather tanneries, which source their supply mostly from the local market, and footwear producers, who use both local and international markets for raw material supply. The most important source of raw material for leather tanneries are hides and skins that are procured from skin collectors and traders. Ethiopia's leather and leather product sector produces a range of products from semi-processed leather in various forms to processed leathers including shoe uppers, leather garments, stitched upholstery, backpacks, purses, industrial gloves and finished leather.

The leather industry throughout the world has been closely identified with the generation of air, liquid and solid waste pollution. The tanneries generate huge amounts of liquid and solid wastes and emit obnoxious odours caused by the degradation of protein material of skin and the generation of gases. Inappropriate management of the tanning industry results in detrimental effects on health and environment, i.e., untreated effluents can negatively influence water supply, already found to be severely under stress by the effects of climate change.

Currently, there are about 33 registered tanneries⁸ in Ethiopia and the industry has registered a growth in number over the last few years with huge potential to increase output in the near future according to unpublished report from the Leather Industry Development Institute (LIDI). Most of those tanneries are located in Addis Ababa and adjacent cities such as Mojo, Holleta, Sebeta, Debrezeit. Besides there are tanneries in the regional states like Kombolcha (Amhara), Debre-Birhan (Amhara), Bahiridar (Amhara), Wukro (Tigray) and others. According to the Ethiopia Leather Industry Assocation (ELIA), all of them are of considerable size with the smallest having a soaking capacity of 3,000 skins per day and the largest having soaking capacity of 15,500 skins per day. The National Growth and Transformation Plan put the leather industry as one of the priority sectors.

The Constitution of the Federal Democratic Republic of Ethiopia provides the overriding principles for all legislative frameworks in the country. The concept of sustainable development and the environmental rights of the people are protected in the Constitution by articles that stipulate the rights of peoples in the country. The concept of sustainable development and environmental rights are enshrined in article 43, 44 and 92 of the Constitution (FDRE, 1995).9 For instance, according to Article 44; Environmental Rights, all persons have the right to a clean and healthy environment; and those who have been displaced or whose livelihoods have been adversely affected as a result of State programs has the right to commensurate monetary or alternative means of compensation, including relocation with adequate State assistance.

To cope with the prevailing environmental problems such as land degradation and other climatic hazards (rainfall fluctuation, increasing temperature, flooding), and speed up socioeconomic development, the Government of Ethiopia initiated the Climate-Resilient Green Economy Strategy as a development strategy in 2011. This development direction promotes environmental protection and reduces fossil fuel consumption which releases greenhouse gases into the atmosphere. With demand for energy growing with the increasing population, industrialization and urbanization, the Government realized that harnessing clean and renewable energy sources such as wind, solar, hydro and geothermal energy sources is critical.

However, there are different complains from the communities who settled nearby the tannery industries for the fact that most of the industry discharges its by-product wastes in to streams and rivers. This adversely effects the productivity of farmers by killing their live animals and vegetables. To address this problem, the Government has adopted various policies to make the tanning industry more eco-friendly.

1.5 Ethiopia's leather sector export performance

The leather industry is segmented into three subsectors: the production of finished leather from raw hides and skins (tanneries), the production of leather footwear, and the production of other leather goods such as garments, bags, gloves, belts and accessories. The two latter sectors are processing domestically produced and imported finished leather. They also have to import most other inputs, including chemicals, but also simple packaging materials like wrapping papers and shoe boxes. In addition to the three leather manufacturing sub-sectors, the recovery and collection of skins and hides, at the upper end of the value chain, is a critical element for the overall development of the leather sector and for exploiting Ethiopia's comparative advantage. At present, the domestic value chain is not well integrated and



most participants in the leather supply chain operate independently instead of interdependently (USAID 2013).¹⁰

The export performance of the leather sector for the last ten years starting from 2006-2015 shows that there are huge variations. Figure 4 demonstrates that when the Government of Ethiopia introduced a higher export tax for raw hides and skins in 2008, the export trend of the product in the same year and the next year experienced negative growth. It is clear that, let alone a higher tax rate, levying tax on any export negatively affects the export competitiveness of the product. The export trend of raw hides and skins presented in Table 1.6 tells us the same story.

Table 1.7 shows that on average, above 50 per cent of Ethiopia raw hides and skins are exported to Italy and China which generates \$446,542,000 as a

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
RHS	77 693	93 394	90 960	42 769	67 199	122 713	85 608	103 422	97 463	98 098
Growth	-	20.21	-2.61	-52.98	57.12	82.61	-30.24	20.81	-5.76	0.65
FLP	3 176	8 448	9 764	7 109	8 602	9 313	17 410	31 629	39 325	44 313
Growth	-	165.99	15.58	-27.19	21.00	8.27	86.94	81.67	24.33	12.68
Total of the sector	80 869	101 842	100 724	49 878	75 801	132 026	103 018	135 051	136 788	142 411
Growth	-	25.93	-1.10	-50,48	51.97	74.17	-21.97	31.09	1.29	4.11
Growth		20.00		00110	01101	,	21101	01100	1120	

Table 1.6: Ethiopia export performance of leather industry

Source: ITC data

Table 1.7: Ethiopian leather product export destination, 2006–2015									
RHS		Average import	F	LP	Average import				
Importers	Average share	(thousands of \$)	Importers	Average share	(thousands of \$)				
World	100	879 319	World	100	2 052.8				
Italy	26.07	229 243	United States	67.54	1 386.4				
China	24.71	217 299	Germany	11.35	232.9				
Hong Kong (China)	14.42	126 762	Italy	3.63	74.6				
United Kingdom	10.30	90 555	Japan	3.55	72.9				
India	8.33	73 215	United Kingdom	2.77	56.9				
Thailand	3.32	29 235	Sweden	2.15	44.2				
Indonesia	1.73	15 188	China	1.88	38.5				
Turkey	1.34	11 796	Hungary	1.53	31.5				
Malaysia	1.08	9 498	Canada	1.38	28.4				
Germany	1.05	9 225	Thailand	1.22	25				

Source: ITC data

foreign currency for the country. The next important market destinations of Ethiopia's raw hides and skins are Hong Kong (China), United Kingdom of Great Britain and Northern Ireland, and India. Those trading partners are also among the world's top importers. An annual average of 67.54 per cent of Ethiopia's leather product exports were imported by the United States. Whereas Germany and Italy also are among the top market destinations of Ethiopia's leather products with an annual average annual share of world imports of 11.35 per cent and 3.63 per cent.

The Government of Ethiopia has been doing much to develop the tanning and finishing industry so that it can benefit more from its resources. Following this, the country is increasingly known as an exporter of finished leather. But, the difficulties at the marketing end of the business have caused a lot of challenges for the export performance of the finished leather and leather product firms. The main constraints identified as the factors that hinder the well-functioning of the leather industry production and exports are:

Shortage of hides and skins: Critical shortage and quality of hides and skins is a major problem faced by tanners in Ethiopia. This is considered to be one of the reasons for the tanneries' low capacity utilization. This problem is actually associated with the value chain starting from animal husbandry, poor animal veterinary services, and traditional ways of slaughtering to poor collection, handling, preservation and transport of hides and skins at different levels. Moreover, many meat producers do not consider selling their skins to the leather industry as a part of their business plans.

Shortage of finished leather: The leather garment and footwear industries face increased cost of production, underutilization of capacity and inability to deliver for export market mainly as a result of the shortages of finished leather.

Skilled labour: The lack of skilled labour has been cited as major constraint in the sector, in particular in design and cutting.

Competition with low cost shoe imports: The Ethiopian shoe market is of considerable and increasing size but the Ethiopian shoe industry seems to be unable to make full use this opportunity. Low

Product description	2011	2012	2013	2014	2015	Total	Average
RHS	80 275	96 561	138 181	117 776	60 031	492 824	98 564.8
Growth	-	20.29	43.10	-14.77	-49.03	-	-
FLP	49 790	50 511	45 463	62 135	63 235	271 134	54 226.8
Growth	-	1.45	-9.99	36.67	1.77	-	-
Footwear	397 388	486 153	559 107	433 645	331 167	2 207 460	441 492
Growth	-	22.34	15.01	-22.44	-23.63	-	-

Source: ITC data





cost shoe imports in particular from China remain a challenge in the domestic market.

Physical infrastructure and customs: In terms of infrastructure the major problems are power, water and transport services. Complicated customs procedures and delays are also quoted as major export constraints.

Access to finance: In terms of finance, the main problem is lack of access due to collateral requirements, high transaction costs, high interest rates and low credit ceilings.

Labour wage issue: Wage levels in the Ethiopian leather sector tend to be below wages in other industries.

Bilateral trade between African countries, when analysed for the periods 2011 to 2015, shows that the trade of raw hides and skins, finished leather products, and footwear between the countries registered positive growth in 2012 and 2013 with the exception of the trade of finished leather products which exhibited negative growth. In contrast, trade in the sector grows negatively in the next two years with the exception of trade of finished leather products.

As shown in Table 1.8, intraregional trade in both raw hides and skins and finished leather products remains significant. Using intra-African import data it is possible to identify potential markets for leather products and raw hides and skins for Ethiopia. Figure 5 shows the top importers of leather products in the bilateral trade between African countries over the last ten years. Namibia, Mozambique and Botswana are the top importers of these products with an average share of 24 per cent, 15 per cent and 12 per cent respectively. Given this, those countries presented here can be potential market destinations of leather articles exported by Ethiopia.

Similarly, Figure 6 shows that South Africa, Kenya and Tunisia are the major importers of raw-hides and skins for the years under study with an average share of 39 per cent, 17 per cent and 8 per cent respectively. Thus, those major importers can be major destinations of raw hides and skins exported by Ethiopia.

1.5.1. Leather shoes and other leather products

The leather industry in Ethiopia started some 90 years ago, when the then Asko Tannery, now known as Tikur Abay Shoe Factory, first opened its doors. The success of this factory nurtured a number of shoemakers, who subsequently established their own factories in Addis Ababa and across the country. Today, in the Merkato district of Addis Ababa, a huge marketplace exists for shoemakers serving the domestic market with wholesale shops dealing in leather, soles, shoe accessories, and shoe retail stores. At the same time, a number of factories are active that produce shoes for the export market, including Sole Rebels, Oliberté and Enzi. The Ethiopian footwear industry produces shoes that are globally competitive in terms of both quality and price. Shoe-making is the major industry which uses Ethiopian leather. Ethiopian footwear factories produce men's and women's casual shoes and children's shoeuppers made of pure leather.

The country is home to dozens of shoemaking companies. In addition to local names such as Sole Rebels, Oliberté and Enzi, international players like the Huajian Group are also active in the sector. The latter, a Chinese owned company, has been exporting some 20,000 pairs of shoes a month since it launched its manufacturing facility outside Addis Ababa in 2012.¹¹

Big brands dominate the market by outsourcing some of their services including manufacturing plants. This allows them to focus on designing, marketing and logistics operations. "We have no alternative but take the prices they give us if our objective is to generate hard currency from our products. Our company used to produce some of these major shoe brands and it was not a good experience for us," said, the General Manager of Ramsay Shoe Factory, whose company is trying to brand itself in the country and neighbouring African countries. "I think one of the key reasons Ethiopian shoe brands are not known globally or even in Africa is due to the lack of finances. But we are now increasing our outlets across the country and in Africa. Recently, we opened outlets in Khartoum, Sudan and Djibouti. We also plan to do the same in Kenya and Uganda soon," said the manager. Besides, the corporate communication director at LIDI said the institute was working on ways to ensure that brand recognition of local brands and improved distribution and retailing channels are developed.

"The major problem we identified in Ethiopia's shoe industry is the lack of raw materials in terms of finished leather," said Birhanu Serjebo, Communication Director at the Ministry of Industry's Leather Industry Development Institute. "While the total demand of leather in the country is 40 million pieces per annum, we are only producing 21 million pieces. So, our factories are operating at under half their production capacity. We are also trying to solve this problem through production of synthetic sport shoes which dominate the global shoe market," he said.

The Ethiopian footwear industry produces shoes that are globally competitive in terms of both quality and price. Priority should be given to maintaining the quality of the hides and skins, leather and leather products for export.

Finished leather products exports have been growing in recent years. This is mainly because over growing export levels of foreign-owned tanneries engaged in the sector. Very few of the domestic tanneries have the technological capacities required for export production. At the same time, Ethiopian leather prices have increased in recent years, and as clients in target markets are price-sensitive, this has caused a loss of potential market share to more efficient, lower final price competitors from China, Pakistan and India.

More precisely, increasing hides and skins prices for the leather sector persisted in Ethiopia because the domestic supply of hides and skins regularly falls short of demand. This in turn leads to fierce price competition among tanners who, facing constrained supply, often bid up the price of the raw materials, with attendant effects on the cost of finished leather production and the profitability and international competitiveness of tanneries.

For example, the Ethiopian glove industry, which currently strictly focuses on export markets, is in its infancy and is expected to grow rapidly in the years to come as more investors discover that Ethiopian sheep skin is one of the best materials in the world for making fashion and sports gloves because of its softness and strength.

1.6 Market structure of the leather sector

Michael Porter's five forces: the relative power of suppliers, the relative power of buyers, the level of rivalry among existing firms, the level of threat from new entrants, and the level of threat from substitute products are used for the analysis of the market environment. In the tanning and finishing industry, there is growing power of suppliers, both globally and locally. Suppliers of raw hides and skins are demanding higher prices. In some countries suppliers had started to process the raw material to the semi-processed wet blue level (allowing hides and skins to be stored rather than being sold immediately to tanners for processing). This enabled suppliers to overcome the pressure from tanneries by enhancing their negotiation power (i.e., suppliers could wait and sell their inventory at a later date and to a higher bidder). When governments in some countries banned the export of leather prepared at the semi-processed wet blue level, this reduced the suppliers' power while increasing the negotiation power of tanners in those countries (tanners knew that eventually local suppliers would lower prices since their products could no longer be exported to foreign tanners willing to pay higher prices). This suggests that if the bargaining power of suppliers' is high, it may be difficult for an industry to be competitive, due to higher upstream prices.

The relative power of buyers is high in the finished leather market. Buyers usually demand a price reduction and supply of various types of finishing in terms of colour and product characteristics. Therefore, tanneries should make themselves ready to meet the orders they receive from buyers by strengthening their capacity in terms of employees' skill, technology and overall business management.

The other force to consider is the level of rivalry among existing firms. As the export business is sought by firms from many countries, competition is expected to be high. However, leather is a scarce resource and rivalry cannot indefinitely lower prices since leather costs cannot be undercut. Rivalry would rather take the form of product differentiation and order processing flexibility.

The leather industry in general and finished leather industry in particular has some level of impediment; namely that it is not that attractive for new entrants. The finished leather industry may be built if tanners opt for forward integration, if leather product manufacturers opt for backward integration, or if firms or individuals join the industry by allocating resources in the form of joint ventures. However, new entrants are not likely to represent a significant threat to a mature finished leather production industry.

The more important threat to leather product producers is from substitute shoe upper products. This threat is expected to be high since leather can easily be substituted by synthetic leather, plastic, and textile materials to reduce production costs and decouple production outputs from higher cost, limited supply finished leather inputs. Footwear and other products made from non-leather materials have surpassed leather products with regard to production and trade volume. The sports footwear industry used to consume large quantity of leather, especially split leather. Recently, however, the sports footwear industry is using higher performance non-leather materials developed through research and development. Other leather products, like hand bags and travel bags are also made from non-leather materials in large volume. The threat from substitute products is, therefore, high in the case of finished leather production industry. As manufacturers shift to using substitute materials, the negotiation power of finished leather production industry will be lower, and buyers may negotiate for lower prices.

About 80 per cent of all hides and skins entering the formal market are from rural areas where they are collected by private traders. The remaining 20 per cent are derived from slaughtering facilities in major towns and cities. The Ethiopian leather sector is composed of raw hides and skins traders; leather tanneries, which source their supply mostly from the local market; and footwear producers, who use both local and international markets for raw material supplies. The most important source of raw material for leather tanneries are hides and skins that are procured from skin collectors and traders.

Value added finished leather products are produced under private Ethiopian labels, in particular for shoes. Additionally, many factories sell directly to overseas importers/wholesalers, or to direct buyers, who facilitate the production and export of footwear and other finished leather products under the private labels of department stores, boutiques, shoe retail chains and mail-order houses, as well as internationally wellknown brands under contract.

According to the GTP-II, regarding leather products there are about 26 medium and above sized manufacturing companies and 448 small and micro manufacturers in the country. Thus the number of manufacturers/suppliers is large enough and they produce differentiated¹² or similar products where the main differences relate to the quality of the products they produce.

1.7 Role of leather sector to the manufacturing export and national economy

The leather and leather products industry has multiple linkages to the wider rural economy (Girum and Florian, 2013).¹³ The leather and leather products industry has multiple linkages to the wider rural economy. It is also highly labour intensive in its raw material sourcing, transportation, processing and marketing phases. The industry thus possesses an enormous potential to create much needed non-agricultural employment, and looks set to play an important role in poverty reduction.

Table 1.9: Inward FDI for the leather sector in general, FY 2015								
Product type	Performance	Production	Number of new firms					
Finished leather	Planned	286 000	3					
	Actual	5 147 000	5 * All are foreign companies					
Leather shoe (pairs)	Planned	8 611 000						
	Actual	325 000	8 of which 5 foreign companies					
Leather gloves	Planned	403 000						
Leather gloves	Actual	2 000 000	3, 2 of them are foreign companies					
Leather goods and garments	Planned	741 400						
	Actual	137 480	6, only 1 is a foreign company					

Source: GTP-II

Yet this potential has remained largely unexploited. It is beset with far reaching structural problems unique to the leather sector, ranging from unorganized hide and skin collection systems upstream to poor marketing infrastructure downstream. It is not easy for the sector to achieve significant growth without properly addressing these deep rooted problems.

Already today the leather products sector accounts about 2.83 per cent of the total export earnings and enjoys an annual average growth of nearly 13 per cent. As noted in the GTP-II plan, the leather and leather products sector contributes on average about 6-8 per cent of the gross value product of all manufacturing industries. Moreover, according to the same source, the sector contributes about 6 per cent to national GDP and the export of leather products continues to be an important source of foreign currency earnings. In the fiscal year of 2015, records indicate that 22,673 both permanent and temporary jobs have been created in the production and export of the leather sector. Of this figure, 11,598 are female workers and the remaining 11,075 are male employees. These figures exceed the Government's forecasted target of creating 16,726 new jobs.

As shown in Table 1.9, for the fiscal year of 2015 through the GTP-II plan, the Government had planned to attract an investment of 3 tanneries to raise production and export of the sub-sector with an added production capacity for processing 286,000 raw hides and skins. However, the actual number of manufacturing industries was above this target: five new foreign companies with a combined capacity significantly larger than the Government target was achieved. During the same year, however, leather shoe and garment production fell far short of Government expectations.

Table 1.10 shows the share of the leather sector (raw hides and skins, leather articles and footwear) to the total manufacturing exports of the country for the last five years. The share of export of raw hides and skins to the total manufacturing export is very significant and

Table 1.10: Share of leather sector to the manufacturing export, 2011–2015 (thousands of \$)									
Product label	2011	2012	2013	2014	2015				
Manufacturing export	419 189	457 819	771 292	1 669 495	1 303 919				
Raw hides and skins	122 713	85 608	103 422	97 463	98 098				
Share to manufacturing export	29.27	18.70	13.41	5.84	7.52				
Footwear	8 637	14 400	28 343	33 885	37 689				
Share to manufacturing export	2.06	3.15	3.67	2.03	2.89				
Articles of leather ¹⁵	676	3 010	3 286	5 440	6 624				
Share to manufacturing export	0.16	0.66	0.43	0.33	0.51				
Total Sector	132 026	103 018	135 051	136 788	142 411				
Share of the total sector	31.50	22.50	17.51	8.19	10.92				

Source: ITC data

much larger than for leather articles and footwear. This suggests that Ethiopia is good at exporting raw hides and skins but weaker in exporting value added leather products. Whereas, the articles of leather contributes a very insignificant amount to the total manufacturing export of Ethiopia. The contribution of the export of the total sector to the export value of manufacturing goods trend from 31.5 per cent in 2011 to about 11 per cent in 2015.

1.8 Ethiopia's leather competitiveness

The Revealed Comparative Advantage (RCA) provides useful information about potential trade prospects with new partners. Countries with similar RCA profiles are unlikely to have high bilateral trade intensities unless intra-industry trade is involved.

RCA indices evaluates export performance as the total exports of a specific product, divided by the total exports of that country compared to the world exports of the product, divided by total world exports. The factors that contribute to movements in RCA are economic: structural change, increased world demand and trade specialization.

RCA is defined as follows:

$$\mathbf{RCA}_{ij} = (\mathbf{X}_{ij} / \mathbf{X}_{it}) / (\mathbf{X}_{wj} / \mathbf{X}_{wt})$$

Where, RCAij represents the revealed comparative advantage of a given country i, Xij represents the export volume of product j in country i, Xit represents the total export volume of country i, Xwj represents the export volume of product j of the world and Xwt represents the total export volume of the world. In other words, the numerator is the share of a country's total exports of the selected product in its total exports and the denominator is share of world exports of the same product in total world exports. The index of revealed comparative advantage takes a value between 0 and positive infinity. If it takes a value greater than unity, the country has a revealed comparative advantage in that product and a value lower than unity, country has comparative disadvantage in that product. The index might be affected by anything that distorts the trade pattern, e.g., trade barriers, changes in input supply costs, or increased global demand.

Table 1.11 shows a comparison of the revealed comparative advantage indexes for two sub categories of leather industry for the period of 2006 to 2015 based on the data extracted from ITC. The first group is the RCA for the raw hides and skins (RHS) and the other category is finished leather products and (FLP) which includes leather, leather products and its fractions. The RCA indices of Ethiopia and other countries namely Kenya, South Africa and Nigeria are compared. The table indicates that the RCA index for raw hides and skins for all the countries is greater than 1 which indicates that all of these countries have a comparative advantage from the export of the hides and skins. However, the RCA index for the leather and its articles is less than 1 showing that they have a disadvantage in exporting value added leather products.

Ethiopia's leather sector in general enjoys significant international comparative advantages owing to its abundant and available raw materials, highly disciplined workforce and cheap prices. As discussed in the previous sections, Ethiopia boasts the largest livestock production in Africa, and the 10th largest in

Table 1.11: RCA analysis of selected Sub-Saharan countries, 2006–2015

	Fthi	Ethiopia		South Africa		eria	Kenya	
Year	RCA of RHS	RCA of FLP	RCA of RHS	RCA of FLP	RCA of RHS	RCA of FLP	RCA of RHS	RCA of FLP
2006	30.60	0.32	1.46	0.09	0.54	0.05	4.22	1.00
2007	31.94	0.72	1.49	0.08	3.10	0.12	5.06	1.24
2008	31.21	0.69	1.31	0.08	4.57	0.08	5.34	1.02
2009	15.64	0.43	1.48	0.08	6.07	0.17	3.89	0.80
2010	14.40	0.37	1.13	0.28	17.65	0.41	5.12	0.85
2011	26.03	0.36	1.33	0.25	3.44	0.10	7.90	0.75
2012	17.03	0.59	1.47	0.26	4.55	0.11	8.37	0.87
2013	13.42	0.72	2.30	0.25	5.40	0.20	9.57	0.83
2014	8.92	0.60	2.01	0.27	2.98	0.05	7.48	0.62
2015	10.50	0.69	2.13	0.27	**	**	**	**

** data not available for the specified period. Source: ITC data





the world. Thus, this Revealed Comparative advantage in raw hides and skins is expected.

As Figure 7 shows the RCA index of the raw hides and skins (RHS) of Ethiopia is much higher than the other countries pointing to a promising capacity to be exploited relative to other African countries.

In contrast Figure 8 shows the Revealed Comparative advantage index of leather products for all the countries under consideration is below one with the exception of Kenya in the beginning. This in turn shows the countries have a comparative disadvantage in the leather products sector.

Given the comparative advantages of raw hides and skins, the leather sector in general has a potential to gain market share in the global market for leather and leather products and to become a world class supplier of high quality finished leather and leather products, including shoes, garments, gloves and accessories. Foreign investors have been increasingly discovering this potential. However, the extent to which these comparative advantages translate into a competitive advantage on international markets depends on various factors, especially the overall technical efficiency of the sector, labour productivity, and the quantity and quality of the locally supplied raw materials.

1.9 The effect of incentive schemes (Enabling Policy Environment)

Ethiopia is known in the international leather market

for its sovereign qualities of sheep skins that are acknowledged as being the best in the world by many. Ethiopian sheep skins are sought for high quality glove leather and the goat skins are equally acknowledged to be the finest for making suede garments and footwear.

Cognizant of the potentials that this renewable resource has for the development of the country, the Government of Ethiopia puts developing the leather sector among its top priorities. Its initial step towards fostering the development in this sector is to create a business environment conducive for the private sector. This involved the deregulation and liberalization of the goods and factor markets maintaining a stable and predictable macro-economic environment, revision of the investment code to widen the scope and areas of investment, additional incentive schemes that add to the profitability private investments, etc.

The streamlining of administrative procedures has also been effected: licensing and business registration in Ethiopia are matters that can be done in one or two hours; the acquisition of land for constructing a factory requires only a week or two, etc. Investors in the sector are accorded with duty free and tax free privileges while importing the required machinery and equipment, tax holidays for up to seven years, loss carry forward for half of the tax holiday period if new investments incur losses, income tax exemption for expatriate employees for two years, a foreign currency retention scheme for exporting companies, etc.

A growing industry

Tanning industry: Backed by considerable support, the Ethiopian leather industry has gained momentum over the past several years. While the number of tanning factories was only handful ten years ago, they now number 33 with more to come online soon.

Footwear industry: The footwear sub-sector has also grown considerably fast. The daily output of export-standard footwear has now reached more than ten thousand pairs per day from a very modest size of less than two thousand only five years ago. Encouraged by the improvement of the industry, world known footwear companies from China, Italy and the United Kingdom have shifted their production facilities to Ethiopia from where they have previously been engaged in South East Asia.

Leather goods industry: The leather goods industry has also gathered momentum spurred by the various support initiatives facilitating its growth. The number of industries engaged in the production of high quality leather garments and accessories has been on the increase so much so that a production line able to lure the sophisticated tastes and trends of the highest market segment in the western world is now possible.

Enormous market opportunities: The production of leather and leather goods has great potential in Ethiopia not only because of the steady increase in demand for leather products around the world but also because of the unique marketing opportunities the country itself offers. Increasing leather product consumption levels of its 90 million citizens and immense opportunities that can be exploited through the bilateral and multilateral arrangements, and preferential treatment in trade and commerce provided to Ethiopia by many countries are all factors that make production in the country particularly attractive for foreign investors.

All-rounded institutional support

There are several organizations working in Ethiopia to support business and investment initiatives in leather and other sectors. All of them have specialized personnel that can advise investors to expedite their take off. The following are some of the most important institutions that can be contacted:

The Ministry of Industry: supports businesses to establish themselves; helping them to obtain land for the construction of factory buildings, etc. These institutions also construct and recommend investment options with various incentives that help new entrants achieve their business plans.

The Ministry of Livestock and Fishery: provides extension support, inputs and regulates product quality in collaboration with regional agricultural bureaus.

The Ministry of Trade: provides trade registration and licensing services and regulates the quality of leather and leather products exports to ensure nationally set standards for exports are met.

The Ethiopian Investment Commission: registers new investments, ascertaining and certifying the incentives they qualify for; helps in acquisition of land for project sites; provides information on investment opportunities and regulatory conditions affecting investments in the country, etc. Acquisition of an investment license usually takes less than one hour provided the applicant fulfils and comes with the necessary documentation.

The Leather Industry Development Institute (LIDI): Another milestone in the Government's effort to promote the leather sector is the setting up of the Leather and Leather Products Technology Institute (LLPTI) in 1998. In 2010, the mandate of LLPTI was significantly expanded and it was made the most important institute responsible for the development of the leather industry under the MoI, and hence, was renamed as the Leather Industry Development Institute (LIDI).

The Ethiopian Leather Industries Association (ELIA): is a sectoral association of the leather industry. It serves as a bridge between the private sector and the Government by addressing issues through policy dialogue. As part of its service, it organizes and coordinates the international trade shows so as to link the members of the association to the world market. It also provides information on the potential, opportunities and challenges of the industry and remains a very important partner for investors in the Ethiopian leather sector.

International development partners: There are many international development partners¹⁴ supporting the emergence of the Ethiopian leather industry through various technical cooperation activities.

1.10 SWOT analysis for the leather sector

The reduction of trade barriers creates competitive

Table 1.12: SWOT analysis of the leather sector								
SWOT analysis for the leather sector								
Strengths	Weaknesses							
 Fairly modern technology. Relatively large capacity. Good basic finishing capability. Easily trainable and relatively low wage human resource pool. Government owned institute of leather and leather products. Strong Government support. 	 Lack of strategic management. Poor marketing capability. Shortage of working capital. Poor supply chain coordination. Lack of creative finishing skills. 							
Opportunities	Threats							
 Recognition as supplier of leather. Stable economic and political environment. Low wages and cheap utility costs. Leather has good natural quality. Presence of training institutions. Presence of accreditation and testing facilities. High investment on infrastructure development. Presence of strong air cargo and sea transportation links. 	 Poor quality raw material from some suppliers. Shortage of supply of skins. Fluctuation of power supply. High transportation costs. Delay in customs clearance. Insufficient supply of financing. Unstable economic conditions in destination countries. Shortage of chemical supply. Environmental protection regulation costs. 							

pressures and the potential for technology transfer so as to lead to productivity gains and restructuring of an economy toward its areas of comparative advantage. It is therefore expected that trade liberalization in Ethiopia would have led to changes in the composition of exports so as to reflect Ethiopia's comparative advantage in the global economy.

As shown in Table 1.12 there are many strengths and opportunities which can be exploited for the better development of tanneries and finished leather products export oriented firms in Ethiopia. There are also many weaknesses and threats which should be overcome by coordinating the firms' resources and all stakeholders to improve the export performance.

SWOT analysis alone, however, cannot exhaustively outline the full picture of all factors to be considered during the preparation of business or export marketing strategy. UNCTAD's National Green Export Review stakeholder dialogue and analysis helps provide a full picture of the export environment in which the firms are operating.

1.11 Ethiopia's leather sector challenges

The Ethiopia leather sector suffers with numerous

challenges discussed as follows:

- Low quality and quantity of raw materials: as result tanneries have been facing acute shortages of raw hides and skins. Hence, most of the tanneries are utilizing far less than their full production capacity. In addition, unavailability of chemicals and other inputs are affecting the finished leather and leather products manufacturing and exporting companies.
- The business relation between raw hides and skin suppliers and tanneries is loose due to the absence of timely product delivery and delays on payments.
- There is insufficient skilled and semi-skilled manpower especially in supervisory and managerial functions in the leather factories which yields low productivity.
- Lack of modern technology results in lowered quality and quantity of finished leather production which also affects the competitiveness of the sector relative to the world market.
- The existence of insufficient and inconsistent market promotion and communication efforts as well as lack of coordination among stakeholders.
- Ethiopian owned companies lack sufficient working capital due to lack of finance.
- Persistently low wages in the leather sector in general are causing scarcity of manpower. Unskilled

Table 1.13: National Plan of Action for the leather sector

Problems identified	Causes for the problems	Actions to be taken
Poor quality of hides and skins.	 Lack of collection centres. Low level meat processing. Poor animal husbandry practices and diseases. Lack of appropriate slaughter facilities and tools Poor slaughter practices and skills. Poor storage and preservation techniques. Lack of grading knowledge and skills. 	 Increase the availability collection centres and slaughtering facilities. Improve extension services and disease control. Improve extension services and enforcement of the law. Improve slaughter facilities according to the law. Promote/upgrade slaughter facilities. Ensure capacity building and training. Ensure awareness and enforcement of appropriate laws.
Low capacity utilization of tanneries.	 Fluctuation of raw hide and skins price. Declining market demand due to low environment compliance. Lack of committed investors. 	Put in place a price stabilization mechanism.Compliance with environmental regulations.Scrutinize and review investment conditions.
Law technology utilization	Outdated technologies and worn-out equipment	 Provide technical assistance and support the rehabilitation of factories.
Lack of capital	Shortage of working capital.High cost of financing.Lack of financial management knowledge.	 Improved working capital availability. Facilitate low cost borrowing. Sensitize the community to financial management (training). Encourage partnerships and inter-firm cooperation.
Low competitiveness in domestic and international market	Lack of good quality finished leather.Low level of productivity.	 Improve finishing design technology. Enhance productivity. Promote Ethiopia product in international exhibitions.
Poor coordination among stakeholders	 Various ministries involved in this sector; lines or authority and action are unclear. 	 f Establish coordination mechanisms. Involve stakeholders. Improve the synergy of public sectors. Establish a platform (MOT, MOA and MOI).
Low capacity of producer associations	• Low capacity of service delivery.	• Financial resource mobilization.
Low levels of value addition	Lack of knowledge.Lack of modern technology.High Cost of production.Lack of capital.	 Capacity building for producers as well as exporters of the products. Review the tariffs and/or import duties levied for imported inputs used to process leather. Raise awareness among producers and exporters about value added products.
Lack of access to updated market information	Infrastructural problems such as weak internet connection.Lack of well-equipped and suited experts.	 Training and experience sharing for exporters or those who manage exporting companies. Investing to secure fast and strong internet connections. Using optional communication systems. Establishing trade points (through a market information hub).
Poor logistics facilities	High logistics costs.	• Enhancing the coordination of logistics plans.
Poor managerial skills	Lack of managerial capability.	Managerial skill enhancement.

and even skilled workers start leaving the shoe industry for better paying jobs, many of them in the construction sector. But still on the other side, the presence of cheap labour is being used as an argument to attract foreign investment in addition to the other pulling factors. With a population over 90 million, Ethiopia has an abundant, hard-working, inexpensive and easily trainable labour force.

- Implementation of existing rules and regulations is also a problem: so far, it has been said the Government has adopted various incentive schemes to encourage exports including, importing equipment free of tax, improving service delivery (shortening processing periods for licensing, renewal of permits etc.), exemption of imported inputs for export purposes from indirect taxes, a credit guarantee scheme to avoid problems of working capital for exporters, allocation of finances for loans for those engaged in export activities. However, the implementation of all those incentives is not well organized and the incentives are not effective to their maximum level.
- Despite the existence of labour laws there are still considerable issues regarding to the relationship between employers and workers for wages, safety and other benefits. Employers complain that the laws open a window for inefficiency and that they favour workers because workers can take their case to the court. On other hand employees still express dissatisfaction regarding benefits packages and other rights.

1.12 Recommendations

A National Action Plan building on the recommendations is presented in Table 1.13.

Certainly the leather sector has the potential to increase the GDP of the country. To maximize benefits from the sector, modern management systems, and adequate levels of integration among the various levels of the industry along its value chain have to be properly organized and administered. Additionally, conditions that lead farmers to the black market to sell their hides and skins should be better assessed and addressed.

By recognizing livestock development's contribution to alleviate poverty, the Government has established new Livestock and Fishery Development Ministry. The Government has been working to create conducive conditions for the development of the leather sector by developing free market economic and investment policies, and establishing micro and small manufacturing enterprises. In addition to realizing the intended development goals, strong cooperation among the Government, the private sector and professionals is very crucial so as to mobilize the vast resources we have for the benefit of the country.

In general, the Government needs to make a change to enable the country seize the benefits it deserves. Besides, the Government as well as investors must give due emphasis to both quality and quantity of leather products. As the leather sector is indispensable to economic transformation, translating policies and strategies into action must not be the sole responsibility of the Government; rather all stakeholders need to take part. More specifically, the following recommendations are forwarded:

- Building the capacity of individuals who are in the value chain of the sector.
- Strengthen the leather and leather products marketing system.
- Increase the efficiency of custom clearing, inspection and transit services.
- Improve finance and credit access.
- Strengthen regular monitoring and evaluation at various levels in the value chain.
- Expand road infrastructure to reduce transport costs, to attract private investment in the sector and to facilitate the supply of labour as the production system is highly labour intensive.
- Provision of reliable and timely market information to the processors and exporters.
- Work to promote improved supply chain coordination.
- Improve infrastructure development including electricity supply.

SECTION 2: ETHIOPIA'S SESAME SECTOR

2.1 Introduction

Sesame is the most ancient oil crop adapted to tropic and semi-tropic areas around the world. For Ethiopia, it is the second most important agricultural commodity after coffee in foreign exchange earnings. However, sesame production in most areas is carried out under traditional production systems associated with low production and productivity levels.

Ethiopia is one of the sesame growing and exporting countries in Africa. It has high quality sesame seed varieties suitable for wide range applications. Sesame is produced in different areas in Ethiopia. It grows as a major crop in Tigray and Amhara, and in some areas in the Oromia, Beni-shangul Afar and Southern Nations, Nationalities and People. Types of Ethiopian Sesame are Whitish Humera Type which enjoys strong demand in the world markets, and the darker brown Wellega type for which foreign demand remains high but is lower than Humera type sesame demand.

2.2 Institutional and legal framework for sesame sector

Sesame marketing in Ethiopia is governed by the Council of Ministers' Sesame and White Pea Beans Transactions Regulations. As per the regulations domestic transactions between producers and suppliers take place at primary transaction centres. For international transactions, suppliers are obliged to transact only at Ethiopian Commodity Exchange (ECX) with exporters.

The first of its kind in Ethiopia, ECX is a national multicommodity exchange that provides low-cost, secure marketplace services to benefit all agricultural market stakeholders and invites industry professionals to seek membership enabling them to participate in trading.

ECX is established as a demutualized corporate entity with clear separation of ownership, membership, and management. Thus, owners cannot have trading stakes, members cannot have ownership stakes, and the management can be neither drawn from the owners nor from the membership. Designed as a public-private enterprise, ECX is a unique institutional innovation of Ethiopia. At its inception, ECX is promoted by the Government of Ethiopia. At the same time, ECX offers the sale of membership seats, which are privately owned with permanently and freely transferable rights to the stream of earnings from trading on the Exchange.

Managed by the Government of Ethiopia, ECX design is unique in that it integrates the entire "eco-system" related to the market, spanning the central trading system, warehouse delivery centres, product grade certification, clearing banks, an arbitration tribunal, a market information system linking rural sites, remote electronic trading centres, and a secure data centre to manage membership and market information. An over-arching legal framework and a government regulatory agency ensure the viability of this entire integrated environment. This integration enables a country such as Ethiopia, where none of the individual components may exist as stand-alone institutions, to mutually support and reinforce ECX market objectives.

ECX promotes and enables the following market services:

- Market integrity, by guaranteeing the product grade and quantity and operating a system of daily clearing and settling of contracts.
- Market efficiency by operating a trading system where buyers and sellers can coordinate in a seamless way on the basis of standardized contracts.
- Market transparency by disseminating market information in real time to all market players.
- Risk management by offering contracts for future delivery, providing sellers and buyers a way to hedge against price risk.

Currently, the ECX platform is involved in the trading of coffee, sesame, white beans, haricot bean and green mung beans. In its endeavour to modernize agricultural marketing in the country, the ECX is playing its roles to expand the types and quantities of traded commodities.

2.3 Global market for sesame sector

World production of sesame seeds is estimated at 3 million tonnes, of which, 60 per cent is consumed in the producing countries themselves. Annual trading volumes are estimated at 1,200,000 metric tonnes, valued at \$1 billion. India, China, Myanmar in Asia, Nigeria, Ethiopia, Sudan and the United Republic of Tanzania in Africa and Guatemala in Central America are the major producing and exporting countries.

According to FAO statistics, one can also observe that:

Table 2.1: Global export value trend of sesame, 2006–2015 (millions of \$)											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average
Export value	794.99	1 068.18	1 592.82	1 598.10	2 200.25	2 099.08	2 454.99	3 423.74	3 838.28	3 481.15	2 255.16
Growth	-	34.36	49.11	0.33	37.68	-4.60	16.96	39.46	12.11	-9.30	19.57

Source: ITC data

- Asia produces 64 per cent of the world's supply of seed and Africa 31 per cent, the two regions contribute a total of 95.3 per cent of total global production.
- 28 per cent of sesame produced in the world enters international trade.
- Africa's exports represent 40 per cent of its production.
- Asia exports 17 per cent of its production, and it imports nearly twice as much as it exports.
- Europe is a major net importer.

Table 2.1 shows the 10-year trend of global export value for sesame products which increases for three or four years and then starts to decline in 2013. For example, it shows an increasing trend from 2006 to 2010 but then growth declines in 2011. Overall sesame exports have increased on average by about 20 per cent from 2006- 2015. Supply varies with rainfall which has natural year-to-year fluctuations.

ITC data reveal that there were more than 180 countries which participated in world sesame trade during the period 2006-2015. These countries may be categorized in to two categories, the first includes those countries which are primary producers (mostly developing countries) and the second category includes those countries which import sesame and

re-export it after cleaning and processing sesame into value added sesame products. These latter (second category) countries include Japan, China, United Kingdom, Netherlands, Germany, Israel, Italy, and France, Belgium and Republic of Korea among others.

As it is shown in Table 2.2, according to the average of the data taken from 2006 to 2015, the major five sesame seed exporters (suppliers) of the world are India, Nigeria, Ethiopia, Sudan and United Republic of Tanzania with a world share of 20.57 per cent, 16.37 per cent, 16 per cent, 8.96 per cent and 4.06 per cent respectively. About 63 per cent of the world export of the product is supplied by these top five countries where four of the five countries are in Africa and three of these are in Eastern Africa. This is simply an indication that the eastern Africa region in general has a favourable climate for the production of sesame.

The top three world importers of the sesame seed (raw sesame) are China, Japan and Turkey with a world share of 26.57 per cent, 12.22 per cent and 6.99 per cent respectively which in total is about half of the world export. Sesame oil, a value added product, is traded among various countries with Japan, United Republic of Tanzania, Mexico, China, and Taiwan, Province of China, as major exporters. United Republic

	Sesame seed					Sesame oil				
Rank	Major exporters	Share	Major importers	Share	Major exporters	Share	Major importers	Share		
1	World	100.00	World	100.00	World	100.00	World	100.00		
2	India	20.57	China	26.57	Japan	16.78	United States	33.29		
3	Nigeria	16.37	Japan	12.22	United Republic of Tanzania	13.65	United Kingdom	5.58		
4	Ethiopia	16.00	Turkey	6.99	Mexico	11.58	Hong Kong, China	4.90		
5	Sudan	8.96	Republic of Korea	6.04	Taiwan, Province of China	10.31	Canada	4.83		
6	United Republic of Tanzania	4.06	Nigeria	3.82	China	6.88	Germany	3.96		

Source: ITC data

of Tanzania is major player in the sector which exports both raw sesame and sesame oil.

2.4 Ethiopia's sesame production

The diversified agro-ecology of Ethiopia makes the country suitable for sesame production. Several sesame varieties are cultivated in Ethiopia. However, sesame productivity is highly dependent on the amount and distribution of rainfall. Additionally, the incidence of crop pests and disease affect productivity and production levels.

Ethiopia's natural resource base, the soil, the climate, the relative humidity the vegetation types are the foundations of agriculture. Sesame crop grows on fertile organic soil with relatively high temperature with moderate rainfall. Sesame grows on deep soil types since the tap root penetrates deep into the soil. High temperature and higher relative humidity will result in poor performance of the crop because they give rise to sesame plant disease.

Promising aspects of the sector include: good future prospects of sesame production in Ethiopia; land suitability for sesame production; strong demand for Ethiopian sesame in the world market; and a growing amount of sesame research and development. Taken together these factors can help improve sesame productivity and production levels and thereby increase its contribution to the national economy. The crop is also supported by an abundant labour source for the peak periods (planting, weeding and harvesting). In addition, sesame has become a priority crop for the Government with sesame investment benefiting from increased credit availability from the Government and private creditors.

Crop year	Area (Ha)	Production (MT)	Yield (MT/Ha)					
2009/10	315 843	260 534	0.82					
2010/11	384 162	327 740	0.85					
2011/12	337 505	244 783	0.73					
2012/13	239 532	181 376	0.76					
2013/14	299 724	220 216	0.73					
2014/15	420 491	288 770	0.69					

274 217

256 805

Table 2.3: Ethiopian sesame seed production, 2010–2016(cultivated land in hectare, production in tonne)

Source: Central Statistics Agency data

388 245

340 786

2015/16

Average

seeds and become known for its quality products in the global trade. Humera Sesame, Wollega Sesame, Bure Sesame, Metema Sesame are among the sesame types identified by the geographical names where they grow. White sesame and red sesame are other categories of sesame cultivated in Ethiopia. As indicated in Table 2.3, Ethiopia produced annually on average 450,571 tonnes of sesame seeds from 2010 to 2016.

2.5 The export performance of sesame

The Ethiopian sesame seed export market covers quiet a wide range of countries all over the world. Growing demand in the world market and the available capacity to expand sesame production could contribute to the economic growth of Ethiopia. However, sesame production and marketing in Ethiopia have been facing various challenges that need to be addressed. These include low productivity, inconsistency in quality, insufficient warehousing facilities, and poor infrastructure which include the absence of adequate road network and market information among others.

Table 2	Table 2.4: Ethiopia's major trading partners of sesame, estimated from the average of 2006–2015										
		Sesam	ie seed		Sesame oil						
Rank	Major suppliers	Share	Major importers	Share	Major suppliers	Share	Major importers	Share			
	World	100.00	World	100.00	World	100.00	World ¹⁶	100.00			
1	Israel	22.48	China	56.57	Malaysia	72.52	Sudan	100.00			
2					United Arab						
	Djibouti	14.21	Israel	16.25	Emirates	17.14					
3	China	13.58	Turkey	6.59	New Zealand	2.60					
4	Jordan	12.64	Jordan	4.13	China	2.22					
5	Turkey	10.16	Saudi Arabia	2.46							

Ethiopia has been producing various types of sesame

Source: ITC data

0.71

0.75

Table 2.5: Ethiopia's sesame seeds export performance, 2006–2015											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average
Exported (millions of \$)	160.6	133.1	210.0	334.5	303.3	350.0	432.8	494.8	714.5	474.4	360.8
Growth	-	-17.18	57.81	59.35	-9.33	15.41	23.65	14.32	44.41	-33.61	15.48
Export (thousands of tonnes)	263	235	265	290	280	300	245	290	300	**	274
Growth	-	-10.65	12.77	9.43	-3.45	7.14	-18.33	18.37	3.45	**	2.34

Source: ITC data

These affect the quality of sesame seeds and export competitiveness.

Table 2.4 indicates that the major market destinations of the raw sesame/sesame seed are China, Israel and Turkey with a total export share of 56.57 per cent, 16.25 per cent and 6.59 per cent respectively on average over the past ten years. These top three major destinations of sesame seed account for about 80 per cent of the Ethiopia's total export of the product. Similarly, Israel, Djibouti and China are the major suppliers of the sesame seed to Ethiopia. Therefore, China, Israel, Jordan and Turkey are simply the major sesame seed trading partners of Ethiopia.

2.5.1. Raw sesame

Raw sesame has been the main type of sesame that the country has been exporting. These exports provide significant benefit through foreign currency earnings. There are high levels of production of the different varieties of sesame seeds and overall export performance (for all varieties) is presented and analysed in Table 2.5.

Table 2.5 shows a rising trend for export value of sesame, growing on average, about 15.5 per cent each year for the time period evaluated. In fact, there

has been a fluctuation as the case of global export value trend but the export performance of the country is growing. Ethiopia's sesame product is highly dependent of the availability of rainfall. In seasons where with low rainfall production as well as the export of the product decline.

China remains the top importer of sesame products exported by Ethiopia with a total share of about 53 per cent, 63 per cent and 59 per cent in the recent consecutive years under analysis. Israel and Turkey follow with a total share of 22 per cent, 17 per cent and 18 per cent and 8.5 per cent, 5.4 per cent and 4 per cent respectively. One can conclude that the top importing partners have not changed during the last three consecutive years with the exception of Hong Kong (China) being the new market destination of the sesame seed in 2015.

2.5.2. Hulled sesame

Hulled sesame is one of the earliest steps of value addition for sesame seeds. In Ethiopia, the export of hulled sesame is not significant while the country's policy documents call for a transformation from agriculture to industry in the form of value addition. As Ethiopia is one of the sesame supplying countries, but exports minimal value added sesame products. There is an opportunity

2013			2014			2015		
Destinations	Export value	Share	Destinations	Export value	Share	Destinations	Export value	Share
World	494 808	100.00	World	714 546	100.00	World	474 398	100.00
China	262 674	53.09	China	446 982	62.55	China	281 476	59.33
Israel	108 089	21.84	Israel	122 456	17.14	Israel	83 256	17.55
Turkey	41 984	8.48	Turkey	38 631	5.41	Turkey	19 528	4.12
Jordan	19 904	4.02	Jordan	21 227	2.97	Rep. of Korea	16 613	3.50
Greece	11 765	2.38	Saudi Arabia	15 661	2.19	Jordan	15 856	3.34
Japan	9 999	2.02	Rep. of Korea	11 638	1.63	Singapore	10 012	2.11
Saudi Arabia	9 760	1.97	Greece	9 704	1.36	Hong Kong, China	7 623	1.61
Rep. of Korea	6 0 4 4	1.22	Japan	8 863	1.24	Japan	6 798	1.43

Table 2.6: Ethiopia sesame seed destinations, 2013–2015 (thousands of \$)

Source: ITC data

Table 0.7. Fibble is builted as an

Table 2.7	2010–2016 2010/2016	lled sesar	ne export peri	ormance,
	Volum	Value		
Year	Metric tonne	Growth	\$	Growth
		(%)	(thousands)	(%)
2010	1 036		1 859	
2011	1 497	44.47	2 553	37.34
2012	1 444	-3.52	3 393	32.91
2013	1 216	-15.79	3 882	14.41
2014	1 419	16.69	1 818	-53.17
2015	1 429	0.67	1 352	-25.63
2016	1 432	0.25	2 365	74.94
Average	1 353	-5.51	2 460	4.03

Source: ERCA data

and need to diversify the export of sesame products as much as possible as value added products.

2.5.3. Sesame oil

Ethiopia has been exporting huge amount of raw sesame for the last consecutive years and as a result, the product ranks among the top three sources of foreign exchange in recent years. However, export earnings can be increased to much higher levels through value addition. Instead of exporting raw sesame (sesame seed), the Government can improve policies, incentives and restrictions to encourage producers and exporters alike to invest in the production and export of value added products.

Ethiopia exported sesame oil only in 2009 a level of only about \$36,000 and with the major share exported to Sudan, a low paying market.

Most of the oil seeds are crushed locally without refining. The oilseed crushing and refining industry produces for the domestic market. Most of the oil is consumed as crude oil and Ethiopia is the net importer of refined oil, mainly refined soybean and palm oil; the production of refined oil in Ethiopia is very limited. Refined oil is mainly used in urban regions. For instance: Addis Modjo and other crushing or Addis Ababa refinery units are among the better production facilities in Ethiopia with significant untapped potential to attract European sesame oil buyers. However, their facilities comprise mainly older, small crushing plants that do not meet European standards for refined oil. While modern refining technologies are needed to export sesame oil to European and other major markets, lack of finance, little demand for high quality in the domestic market, and the high cost of quality

production systems hamper investment in the sesame oil sector. Nevertheless, such investment is critical for the processing of sesame into higher value sesame products in Ethiopia with strong export potential in high income markets. Value can also be added at the farm level by increasing levels of certified organic production. In Ethiopia, sesame and other oil crops demand less inorganic fertilizers so it is possible to increase organic production levels of sesame seeds, and thereby use these organic inputs to produce sesame oil, jam, candies and other value added sesame products.

2.5.4. Sesame jam (tahina)

While sesame seeds are partly sold for domestic oil extraction, most is exported to international markets for human consumption and oil extraction.

Table2.	8: Importe	d value of	sesame j	am, 2011–2	2015 (\$)
Year	2011	2012	2013	2014	2015
World	254 000	422 000	807 000	1 003 000	920 000
Growth	-	66.14	91.23	24.29	-8.28

Source: ITC data.

As discussed in the above section, Ethiopia is among the top exporters of raw sesame seed but at the same time it is a net importer of the value added product or processed sesame oil which is improved edible oil for the domestic market.

In some cases, people use traditional mechanisms to produce oil from sesame and also sweets from the product for home consumption. Due to the fact that there is no modern technology associated with the domestic production of oil, sophisticated know-how needed to add value alongside sufficient investment remains essential to produce mainstream commercial products. Only in very rare cases do small scale domestic producers of value added sesame products make products able to enter commercial markets.

2.6 Role of the sesame sector in agricultural exports and the national economy

Agriculture is by far the single most important economic activity in sub-Saharan African (SSA) countries and it remains crucial for achieving the poverty targets of the SDGs in Africa. According to NEPAD (2003)¹⁷ for most SSA countries, agriculture contributes an average of 30-60 per cent of GDP and about 30 per cent of the values of exports.

Table2. 9: Share of Ethio	pia's sesame exp	oorts in total agr	iculture export \	/alue, 2010–201	5 (thousands of	\$)
Year	2010	2011	2012	2013	2014	2015
Total agriculture export	1 884 064	2 195 704	2 433 528	3 305 653	3 997 394	3 723 625
Export value of sesame	303 307	350 039	432 818	494 808	714 546	474 398
Share of sesame	16.10	15.94	17.79	14.97	17.88	12.74

Source: ITC data

For African countries, including Ethiopia, exports are indispensable for the growth of national economies and poverty reduction. Since the economies, and thus domestic consumption levels, of most African countries are relatively small compared to production capacity, exports remain the main engine of economic growth of these countries. Trade in agricultural commodities still dominates the export scene of African countries despite the many challenges it faces. The agricultural sector constitutes a significant part of the whole economy and employees a considerable proportion of the labour force. For instance; according to data from CSA, the share of agriculture in SSA countries accounts for some 40 per cent of the total GDP, 50 per cent of foreign currency earnings and above 80 per cent of employment. In addition, both industry and services are dependent on the performance of agriculture, which provides raw materials, generates foreign currency for the import of essential inputs, and produces food for the fast growing population.

Over the past decade, sesame seeds have been among the major products exported by the country and the table presented above shows the share of sesame seed export to the total export of agricultural products for the last six years. Thus it is easy to conclude that sesame seed export has been contributing a double digit role in the total agricultural product exports of the country which is the major export category of Ethiopia and SSA countries in general.

2.7 The sesame sector's potential

Ethiopia is richly endowed with different soil types and climatic zones suitable for the production of a variety of food crops as well as oil crops. Sesame production is characterized by labour intensive, low-input and rain-fed agriculture. The potential to increase sesame production is substantial. Productivity per hectare can be increased with higher input levels and improved technologies. Arable virgin fertile lands are also available and can offer good opportunities for organic and sustainable sesame seed production. In this regard, the Government enhances investment in the oilseeds sector with an extended package of incentives. The Ethiopian sesame seed export market covers a wide range of countries all over the world where exports can be increased. The following characteristics of the sector also point to significant potential for increasing sesame seed and sesame product exports;

- The growing demand in the world market and the available capacity to expand sesame production could contribute to the economic growth of Ethiopia.
- A major trend related concerning sesame trade is that, recently, demand in China has outstripped its domestic sesame seed production capacity. This has led to a strong increase in Ethiopian sesame exports to China.
- The increasing use of oils and fats for the production of bio energy also leads to higher demand. Considering the bio energy market, in the medium and longer term relatively high demand for sesame seeds and oils is foreseen.

2.8 The market structure of the sesame sector

Sesame market structure can be evaluated by the degree of market integration (perfectly competitive, monopolistic or oligopolistic), buyers' concentration, product differentiation and by conditions of entry and exit.

There are various actors in sesame value chain. These include producers, primary producer cooperatives, small traders (collecting middlemen), suppliers/ wholesalers,¹⁸ traditional oil millers, local consumers and exporters. Primary producer cooperatives collect products from their members and sell in primary transaction centres; directly to exporters through the Ethiopia Commodity Exchange; or they can directly sell to international markets.

Primary Producers include the smallholders and commercial farmers who sell their products to suppliers. In some cases producers sell in small quantity directly to small village traders, traditional oil millers and local consumers. Commercial farms have better bargaining power than small producers and hence, they can sell through the Ethiopia Commodity Exchange or directly to the international market.

Similarly, village traders or collectors are small trading individuals who collect the product in small quantity directly from producers and resell to brokers/ wholesalers, oil millers and local consumers. They act as middlemen who do not add value but merely usurp the benefit which could accrue to producers. Exporters are public and private firms which buy seeds from the suppliers through Ethiopia Commodity Exchange to sell to the world market, while processors, mainly hullers, are firms which buy the seed directly from producers at primary transaction centres and from suppliers through Ethiopian Commodity Exchange and export after processing (e.g., hulling) and packing. Processors or exporters are public and private firms which buy the seeds from collectors and wholesalers to sell in the export market after processing and packing.

As discussed in the previous sections, there are different types and/or natures of sesame in Ethiopia growing in different regions which reflect differences in taste, aroma, size, colour and oil content. Given these differences, the price of different types of seed varies accordingly.

2.9 Ethiopia's sesame competitiveness

As was done to evaluate leather product competitiveness, Revealed Comparative Advantage analysis was used to look at the competitiveness of Ethiopia sesame sector. As discussed in Chapter 1, RCA indices evaluate export performance as the



total exports of a specific product, divided by the total exports of that country compared to the world exports of the product, divided by total world exports.

In Table 2.10, RCA analysis for the sesame sector is made to analyse the degree of export competitiveness of Ethiopia (its RCA) and to compare and contrast Ethiopia's RCA with the RCA of other countries. Countries were selected for comparison based on their comparable ranking in global sesame trade.

The RCA Index of Ethiopia's sesame sector is found to be significantly large for the time periods included in the analysis. As a result, the country has a large advantage in the export of sesame relative to the other

Table 2.10: Revealed comparative advantage analysis of Eunopia Sesame Sector, 2000–2015						
Year	Ethiopia's RCA of sesame	United Republic of Tanzania's RCA of sesame	Nigeria's RCA of sesame	Kenya's RCA of sesame		
2006	2 049.57	150.85	0.59	6.75		
2007	1 208.36	93.30	25.42	1.65		
2008	1 197.89	91.57	16.90	4.36		
2009	1 445.10	151.25	27.25	7.73		
2010	825.08	96.08	46.74	6.46		
2011	1 061.79	122.53	24.57	6.56		
2012	1 034.44	122.14	23.91	1.54		
2013	625.72	161.55	48.01	5.88		
2014	579.96	274.28	25.02	4.88		
2015	390.32	246.23	**	**		

Table 2.10: Revealed comparative advantage analysis of Ethionia sesame sector 2006–2015

** Data is not available for 2015 Source: ITC data countries in Table 2.10. Moreover, the RCA index for United Republic of Tanzania, Nigeria and Kenya is also greater than unity with the exception for Nigeria in 2006 (RCA =0.59).

Though, Nigeria's is the top sesame exporter from Africa where Ethiopia, Sudan and United Republic of Tanzania are the next exporters of the product, the RCA index for Ethiopia is larger than the other major suppliers of the product. This may be due to the fact the total export value for all goods of Nigeria is greater than that of Ethiopia which will undermine the RCA index of Nigeria.

Figure 9 shows the trend of the RCA index for the four different countries where the RCA index for Ethiopia is continuously declining. This is mostly due to the increase in the total goods export value of the country over the last ten years. The trend of United Republic of Tanzania's RCA index shows an increase over the last years whereas the RCA index for Kenya and Nigeria are steadily fluctuating around a stable value.

2.10 Ethiopia's sesame sector challenges

According to a survey performed by the Authors, Sesame Exporters expressed that the sesame sector faces various challenges. Major challenges mentioned include:

- Lower productivity resulting from erratic rainfall has reduced the supply of sesame and the quality of seeds.
- Inadequate market infrastructure such road networks raise transport costs and detract from the competitive edge of Ethiopia in sesame.
- An extended downstream supply (value) chain reduces the profit margin of producers and thereby hinders their incentive to produce more.
- Delay in the provision of credit for working capital has resulted in inability of cooperatives to purchase sesame when prices are declining. Some of the interviewed members have also mentioned the shortage of capital as a major production constraint.
- Sesame producers remained in a low bargaining position due to a lack of negotiation skills, absence of market information on local and international price of sesame.
- Cooperatives and traders have restricted the level of participation of actors including producers and farmers in the exchange market.
- Lack of transparency, accountability, commitment and Bureaucracy of the government system is also

critical problem. Non-synergy of export supporting government institutions is also another challenge for sesame Exporters.

Exporters have difficulties accessing accurate, timely and reliable market information, specifically on production and global sesame price forecasts; they also face export defaults due to international price volatility. Infrastructure problems such as volatility and exaggeration of inland transport prices, and electric power supply fluctuations during hulling and cleaning. This makes exporters inefficient and uncompetitive.

Non-value added brokers are another problem in the sesame sector. An excessive number of brokers between farmers and exporters reduce farmer earnings. Brokers between exporters and end buyers do not allow for a direct link between exporters and end consumers. Most of sesame export business to non-China market is handled by these brokers leaving exporters without a direct linkage with buyers.

2.11 Enabling policy environment

The Ethiopian Government has set for itself a long term vision of becoming a low level middle income country by 2025. Several Government policies and plans are in place to fulfil the larger goal of meeting the SDGs and the vision of becoming a middle income country. As it is mentioned in the Introduction, the latest program is the second phase of the Growth and Transformation Plan (GTP-II) that identifies agriculture and industry as the main drivers of growth. The current Government policies all recognize that the private sector is an engine of development and emphasize the need to pursue export-led growth; advance the Agriculture Development Led Industrialization (ADLI) plan; forge linkages between domestic and foreign investors; and to make the role of government in providing leadership more effective. The purpose is to use agriculture as a path to develop the industrial sector and enhance its contribution to the overall economic growth.

The Government has also adopted various incentive schemes to encourage raw and hulled sesame exports including by importing processing equipment free of tax; improving service delivery (shortening period of license, renewal of permits etc.); strengthening the credit guarantee scheme to avoid shortages of working capital for exporters; allocating financing of loans for those engaged in export activities; creating linkages with foreign investors in marketing and production; and improving transport and transit services.

Institutional framework

Trade policy

Production of oil seed in general and sesame seed in particular has great potential in Ethiopia not only because of the increase in demand for the product around the world but also because of the unique marketing opportunities the country itself offers. Similar to the leather sector case, trade in the sesame sector is supported by bilateral, unilateral and regional arrangements. Moreover, as an LDC, many countries accord Ethiopia with preferential treatment in trade and commerce, including through duty free quota free (DFQF) market access.

Existence of export support and regular follow up

The Government has established different institutions and committees to support and provide policy direction to this sector. Exporters also establish their own associations to manage their export and export promotion activities in a coordinated and organized manner.

The Ministry of Agriculture and Natural Resources: is a Federal Government institution which provides agronomic extension support, phytosanitary and fumigation services, and agricultural inputs. It also regulates product quality in collaboration with regional agricultural bureaus.

The Ministry of Trade: is a Federal Government institution which provides trade registration and licensing services and support for sesame marketing activities from the farm gate to the port in collaboration with other pertinent government institutions and trade associations. Moreover, it regulates the quality of sesame export as per the national export standards.

The Ethiopian Investment Commission: is a commission responsible for registering new investments; ascertaining and certifying incentives they qualify for; helping with the acquisition of land for project sites; providing information on investment opportunities and regulatory conditions affecting investments in the country, etc.

National Export Coordinating Committee

This is an umbrella ad hoc committee which gives regular policy directions to improve the export performance of the country. In addition, the following sub-committees were established to resolve the difficulties encountered by exporters on a regular basis: the Customs and Logistics support coordinating sub-committee (led by the Revenue and Customs Authority); the Supply and marketing coordinating sub-committee (led by the Ministry of agriculture); the Infrastructure support coordinating sub-committee (led by the Ministry of Industry); and the Credit facilitation sub-committee (led by the Ministry of Finance and Economic Development).

Regional Export Support Coordinating Committees: These are the committees established in export product producing regions to support supply side issues. Accordingly, they work on production, quality improvement and domestic marketing.

The Ethiopian Pulses, Oilseeds Species Processors and Exporters Association (EPOSPEA): This is a sectoral Association which mainly deals with advocacy and linkages. It serves as a bridge between the private sector and the Government by providing issues for and facilitating policy dialogue. As part of its service, it organizes and coordinates international trade shows so as to link the members of the association to the world market. It also provides information on the potential, opportunities and challenges of the industry and remains a very important partner to count on while investing in the sector.

Government commitment towards liberalization: The transitional Government of Ethiopia has undertaken different measures to boost the export performance of the country in general. For instance, the Government has undertaken liberalization and structural adjustment program (SAP) together with the World Bank and International Monetary Fund (IMF) to address the internal and external imbalances of the economy. In particular, trade policy reform was undertaken which aimed at promoting exports by diversifying the country's commodity exports. At the same time, Ethiopia is in the accession process for WTO Membership which will further increase market access for its exports.

2.12 SWOT analysis for the sesame sector

The purpose of this SWOT is to provide basic information for the National Green Export Review (NGER) project of Ethiopia. It helps stakeholders to identify priority areas for strategies to enhance the quality and level of exports of sesame seed products to the rest of the world. In order to know and understand what Ethiopia can do to enhance

Table 2.11: SWOT analysis of the sesame sector					
SWOT analysis for the sesame sector					
Strengths	Weaknesses				
 High acceptance of and demand for the product by numerous countries. Strong Government support to improve sesame productivity and quality. Contributes to the sustainability of local agriculture. Other than labour, minimal agricultural input requirements for sesame production. High employment requirements. Diverse agro-ecology and climatic conditions. Relatively pest and disease free production. Established trading connections with overseas markets. The establishment of the railway to Djibouti. Large supply of unskilled labour. 	 Highly dependent on a single market. Lack of timely international price and production information. Insignificant level of production of value added products. Absence of standards on local pricing. Weak improved seed and modern technology utilization capacity. Substantial post-harvest loses. Bureaucratic and inefficient service by some Government institutions. Middlemen are able to set low prices in various parts of the value chains to inflate their profits. Low negotiation power of farmers and producers making them price takers. Limited market information. 				
Opportunities	Threats				
 Export led strategy is now a Government priority. Increasing worldwide demand. Multiple markets and uses. Unexploited global markets such as Republic of Korea, Turkey and Taiwan, Province of China. Further opportunities in China. Large potential for expanding production. Improve farm income by improving quality. Possibility of domestically hulling, grinding or pressing for oil export-related activities. Increase foreign exchange earnings. 	 Future decline in credibility of Ethiopian products and exporters. Foreign investment may remain limited. Continued contract defaults from both buyers and sellers. Fall in international prices and fluctuation/price volatility. Other low cost producers may learn to mirror the comparative advantages of Ethiopian sesame in the global market. Continued lack of access to capital by producers. Excess supply of sesame in the global market. Continued existence of non value-added brokers. Delays in road and infrastructure improvements. 				

its competitiveness, this NGER project engaged all sesame stakeholders in an analysis of strengths and weaknesses deriving from the internal factors and an assessment of opportunities and threats deriving from external factors. As shown in Table 2.11, there are many strengths and opportunities which can be better exploited for the development of the sesame products export business of Ethiopia. There are also many weaknesses and threats which should be overcome by engaging a coordinated effort involving all stakeholders.

2.13 Recommendations

A National Action Plan building on the recommendations is presented in Table 2.12. The following recommendations are forwarded to improve the sesame sector competitiveness. These recommendations have been discussed, elaborated and adopted by national stakeholders through individual consultations and national workshop discussions.

Enhancing production and productivity: Strengthening research and extension; provision of appropriate improved seed varieties adaptable to the specific areas and climatic conditions; building the capacity of sesame farmers including for organic production; maximizing utilization of sesame cultivated land potential to increase production volumes; introducing irrigation systems instead of depending only on rainfall throughout the year; improving post-

Table 2.12: National Plan of Action for sesame sector

Problems identified	Causes for the problems	Actions to be taken
Insignificant value added sesame exports	 Lack of knowledge and/or interest to process or to add value. Lack of modern processing technology. High costs of production. 	 Provide capacity building to producers and exporters. Review the tariffs and/or import duties levied for imported inputs used to process sesame. Initiate awareness raising activities for producers and exporters about value added products.
Inadequate market infrastructure and logistics	 High costs of production. Weak synergy among stakeholders. Lack of modern technology. Lack of sufficient ICT technology. 	 Give priority to the sector and search for alternative funding sources. Establish a sector coordination mechanism. Introduce modern technology.
Lack of capital	 High cost of financing. Lack of sufficient financial management knowledge needed to access credit and lending services. 	 Provide incentives to attract suitable investors. Sensitize the community to financial management practices. Encourage partnerships among producers for credit applications and technology acquisitions.
Poor coordination in policy making	• Lack of organized framework to coordinate the sector.	• Establish a sector coordination mechanism involving all sectoral stakeholders in discussions and decision making.
Fluctuations in the production and/or supply of the product or productivity of the product	 Lack of appropriate improved varieties. High post-harvest losses. High dependability on rainfall. Incidence of crop pests and diseases. 	 Provision of appropriate improved varieties adaptable to the specific areas. Improve post-harvest management systems. Increase the practice of irrigation. Introduce integrated pests and diseases management system.
Lack of access to an updated market information	 Weak market information system. Lack of well-equipped and suitable experts. Infrastructural problem such as weak internet connections. 	 Strengthen the market information system. Provide training and experience sharing to exporters or those who manage the exporting company. Invest in improve ICT systems.

harvest management systems to reduce quantity and quality loss; improving the agricultural extension service; improving farming practices; expanding access to agricultural credit; expanding private commercial farms and improving the knowledge of farmers and trading actors about the product characteristics of the different oilseeds and to avoid common practice of blending seeds having distinct qualities and applications.

Improving the efficiency of marketing system: Reducing the number of middlemen in marketing channels; strengthening market actors' synergies; improving the capacity of market actors; improving the code of ethics for market transactions; provision of reliable and timely market information to farmers, processors and exporters by improving the market information system; strengthening and promoting the marketing system at grass roots level and undertaking regular monitoring and checking on quality of sesame supply to further enhance competitiveness in domestic and international markets.

Strengthening the sesame marketing in ECX: Controlling market channels for seeds so that seeds can only be traded under the ECX platform; provision of warehouses in the major producing areas; establishing an efficient supply chain; strengthening the service of the EXC on quality grading and product delivery.

Improving infrastructures and logistics: Expanding road systems; strengthening market centres; strengthening modern warehouses/storage; introducing quality maintenance capacity; improving access to weighbridges; reducing electricity power fluctuations; expanding road and rail transportation systems to reduce transport costs, improve quality, improve product transactions efficiency, attract private investment, and to facilitate the transport of labour as the production system is highly labour intensive.

Increasing competitiveness of sesame export in global market: Insuring sustainable supply and quality; taking care of food safety issues; preventing blending of different geographic origin products; giving special focus on value addition/hulling, oil crashing, tahini production and confectionary products (candies and sweets) by attracting investment in production technologies; improving product quality; timely supply of goods to markets; aim for zero contact default; strengthen export promotion to increase export share in existing and new destination markets; improving market intelligence about buyers and competitors as competitive power can be increased by a better understanding of the markets; building the capacity of exporters and improving our reputation with trading partners.

Improving the service delivery: Introducing a one-stop shop for Government services; improving the efficiency of custom clearing; improving quality inspection; improving phyto – sanitary, inspection and transit services; enhancing producers' access to credit; and strengthening monitoring and evaluation at various levels in value chain.

Notes

- 1 Hamwey, R., Pacini, H., and Assuncao, L. (2013). Mapping Green Product Spaces of Nations. The Journal of Environment and Development, 155-168.
- 2 Behailu Amded (2017) Major Factors Affecting Hide and Skin Production, Quality and the Tanning Industry in Ethiopia, Advances in Biological Research 11 (3): 116-125.
- 3 Food and Agriculture Organization (2014) World Statistical Compendium For Raw Hides And Skins, Leather And Leather Footwear 1998-2014, Rome.
- 4 For the effective implementation of the Environmental Policy of Ethiopia, the policy encourages creation of an organizational and institutional framework from federal to community levels.
- 5 Normal hours implies that the time during which a worker actually performs work or avails himself for work in accordance with law, collective agreement or work rules.
- 6 Mulat, A. (2015) Revealed Comparative Advantage of Ethiopian Leather Industry with Selected African Economies: International Journal of Business and Economics Research: Vol. 4, No. 5, pp. 229-237.
- 7 Saddlery and harnesses; travel goods, handbags and similar containers.
- 8 Of those 33, 2 are under Investment (establishment). Also, 23 of those tannery industries are nationally owned and the remaining 10 industries are owned by foreigners.
- 9 Constitution of the Federal Democratic Republic of Ethiopia, 1995, http://www.ethiopia.gov.et/constitution
- 10 USAID (2013) Agricultural Growth Project Livestock Market Development, USAID Project Number AID-663-C-12-00009, Ethiopia. https://www.usaid.gov/sites/default/files/documents/1860/AGP-LMD%20 Value%20Chain%20Analysis.pdf.
- 11 CNN report (2014): http://edition.cnn.com/2014/10/15/business/ethiopia-leather-gloves/.
- 12 Monopolistic competitive market: Larger number of sellers that produce differentiated products.
- 13 Girum Abebe and Florian Schaefer (2014) High Hopes and Limited Successes: Experimenting with Industrial Polices in the Leather Industry in Ethiopia, Working Papers 011, Ethiopian Development Research Institute.
- 14 UNDP, UNIDO, USAID, Italian Cooperation, ECBP (Ethiopian Capacity Building Program), ECF-World Bank, COMESA-LLPI, etc.
- 15 Saddlery and harnesses; travel goods, handbags and similar containers.
- 16 The total exported value of sesame oil for the last ten years is \$36,000 which was exported to Sudan.
- 17 Brüntrup M. and Zimmermann, R. (2003) Agriculture as the Potential Engine for African Growth and the Role of NEPAD, http://www.cesifo-group.de/DocDL/forum4-09-focus3.pdf.
- 18 Suppliers are larger traders who have better capacities in terms of finance and other facilities. They resell the seeds to exporters through Ethiopia Commodity Exchange.