An Investigation of the Ethiopian Tanning Industry's Competitiveness

by

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Abstract

Ethiopia's leather development plan has prioritized the tanning industry in order to accelerate the sector's growth. The aim of this study is to identify the factors that allow and prohibit Ethiopian tanning industries from coping with competitive challenges, as well as the competitive advantages and drawbacks that the tanning industry faces.

The study followed a primary and secondary data collection methods, which included both qualitative and quantitative approaches. In the study, 13 functioning tanneries in the country involved in leather production from 2020 to 2021 were investigated. The study data were collected through distributing structured questionnaire and having interviews with tanning industry top management body (i.e. managers, directors, and heads).

The study results are presented in forms of the mean and standard deviation. The study findings revealed that the tanning industry competitiveness is low due to different determinates factors. With the exception of the country's natural resource endowment in hides and skins and low labor cost availability, all determinants of competitiveness (raw material, infrastructure, skilled labor, industry and institution linkage, capital and managerial capability, and government policy) are found to be insignificant.

Similarly, the tanning industry's ability to use its cost advantage in raw hides and skins and maintain its market share on the domestic and international market is limited by poor quality of locally supplied raw material, lack of strong supporting institutions and association's, lack of infrastructure, capital and managerial capability, poor industry and institution linkage as well as factors such as scarcity of skilled labor and raw materials (chemicals and spare parts). In order to enhance the competitiveness of the tanning industry in the country, the industry, government and stakeholders need to work in collaboration in creating strong supporting industries, fulfilling infrastructure, providing investment capital, and supplying experienced managers and skilled workers.

Introduction

Leather and leather products are one of the world's most commonly traded and widely used commodities. In this case, Africa is fast emerging as one of the most promising future markets for sourcing high-quality leather and skins for the world's booming leather industry.[1] (Abtew and Research, 2015).

The Ethiopian Leather industry is centered on its livestock resources, which include 63.2 million cattle, 31.8 million sheep, and 34 million goats, making it one of the world's largest livestock populations.[2-3] Taking into account the country's resource advantage, the countries government identified the leather and leather products sector as one of seven priority areas with potential for industrialization and employment creation opportunities.[4-5]

Despite the country's government initiatives and special consideration, the leather sector's performance was far below the government's and stakeholders' expectations.[6] The tanning industry is dynamic, with distinct characteristics that will have varying effects on the leather sector competitiveness.[7] In this context, assessing organizational competitiveness and establishing competitive strategies has been a major concern in leather processing and marketing, leading to an increase in the number of studies on the subject.

The main objective of this research was to identify the major factors that affect the Ethiopia's tanning industry's competitiveness and to reveal the competitiveness positions of the main and sub factors impacting the industry, as well as to make suggestions for what could be done to improve the sector's competitiveness.

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Competitiveness

The term "competitiveness" refers to an entity's economic strength in comparison to its competitors, and it includes the perspectives of the country, industry, and enterprise.[8] Similarly, most experts use the term "competitiveness" to describe a firm's or industry's advantage over its local or worldwide competitors.[9]

According to Porter 198, gaining a competitive edge is critical for improving corporate, industrial, and economic performance[10] Competitive advantage, is a company's ability to manufacture items that provide more value to customers than competitors' products, resulting in greater sales and profits.[11-12]

In line with this, project management, competitive strategy, partnerships, supply, marketing, technical and technological skills, as well as financial capabilities are all aspects that may be employed to improve the competitiveness of the Ethiopian tanning industry. Many factors may influence the country's tanning industry's competitiveness. It is critical to understand which aspects are most important in this respect.

Methodology

Data Collection:
The study employed primary and secondary data collection methods. The primary data was collected through semi structured closed ended questionnaire questions and face-to-face interviews, while the secondary data were collected through reviewing existing tanning industries reports and different literatures. The questionnaires were divided into two sections, the first section were prepared to gather respondent respondents' profile as well as overall image of the tanneries. The second section of the questionnaire were prepared to identify the constraints that impact the tanning industry competitiveness.

Result and Discussion

Method of data processing and analysis:
The study data collected via questionnaire were filled in SPSS and different data processing and analysis techniques including descriptive and inferential statistics technique were used to analyze the total and mean score of each competitiveness factors.[13]

General information of respondent:
The authors selected the industries top management to respond the questionnaire, because it is expected that most of the respondent will have wide information about their tannings industry, which allows to get a fairly balanced information about the tanning industries. As shown in Table I, managers, directors, and heads were among the respondents who filled out the questionnaires.

General Information of the Tanning Industry:
The ownership structure, and place of the industry has been in operation were all factors considered in the study.

Table I
Respondent position in the tanning industries

Respondent Position	Frequency	Percent	Valid Percent	Cumulative Percent
Deputy Chief Managing Director for Tannery	1	7.7	7.7	7.7
Technical Manager	1	7.7	7.7	15.4
Factory Manager	1	7.7	7.7	23.1
Production Manager	5	38.5	38.5	61.5
Quality Division Head	1	7.7	7.7	69.2
Environmental Head	1	7.7	7.7	76.9
Quality Control and R&D Head	1	7.7	7.7	84.6
Human Resource Director	1	7.7	7.7	92.3
Deputy Manager	1	7.7	7.7	100.0
Total	13	100.0	100.0	

Source: Research Data (2022)

Table II

Name and place of the Tanning Industries available

	Place/City	Frequency	Percent	Valid %	Cumulative %
Batu Tannery	Addis Ababa	1	7.7	7.7	7.7
Ethio Leather Industry (ELICO)	Addis Ababa	1	7.7	7.7	15.4
Bahir Dar Tannery	Bahir Dar	1	7.7	7.7	23.1
Habesha Tannery	Bahir Dar	1	7.7	7.7	30.8
George Shoe Ethiopia Tannery	Modjo	1	7.7	7.7	38.5
Colba Tannery	Modge	1	7.7	7.7	46.2
Modjo Tannery	Modjo	1	7.7	7.7	53.8
Friendship Tannery	Modjo	1	7.7	7.7	61.5
Addis Ababa Tannery	Addis Ababa	1	7.7	7.7	69.2
Farida Tannery	Modge	1	7.7	7.7	76.9
Jianxin Zhang Tannery	Modjo	1	7.7	7.7	84.6
Hodaoche Tannery	Modjo	1	7.7	7.7	92.3
Ethiopian Tannery	Modjo	1	7.7	7.7	100.0
Total		13	100.0	100.0	

Source: Research Data (2022)

Table III

Ownership of Tanning Industry

Tannery	Frequency	Percent	Valid Percent	Cumulative Percent
Government Owned	0	0	0	0
Privately owned	13	100.0	100.0	100.0

Source: Research Data (2022)

Initially, the authors planned to gather data from the country's 20 active tanning industries. However, due to various constraints, data were collected only from 13 active tanning industries. This allowed the research to cover 65% of the country's targeted industries, which is higher than the average. As a result, meeting the target group of 65% was adequate for statistical analysis, resulting in representative findings from the study. During data collection, it was observed that some tanning industries have been closed due to different constraints. As shown in Table II, most of tanning industries are concentrated in one place and which will be a constraint to utilize the countries raw hide and skin.

Tanning Industry Ownership status

As shown in Table III, all (100%) of the targeted tanning industries are privately owned, with government owned industries having limitations. As the country's government is the main concerned body in the development of different policies and facilitation of import material supplies for the tanning industries, limitation of government owned tanning sector may have influence in development of the tanning industry.

Analysis of determinant factors of competitiveness

The degree of mean scores based on the criteria for class interval scale rating were shown in Table IV.

Table IV

The degree of mean scores based on the criteria for class interval scale rating

Range	Degree
1.29-1.99	Most unfavorable
2.00-2.74	Unfavorable
2.75-3.49	Average
3.5-4.24	Favorable
4.25-5.00	Most Favorable

Raw material determinant factors of competitiveness:

As illustrated in Table V, locally produced raw material quality and supply were unfavourable with mean scores of 2.46 and 2.76, respectively. Due to this, the tanning industries are dependent on imported raw materials with a mean scores 3.07. This indicated that, the tanning industry are forced to import most of raw materials (chemicals etc.), from abroad, which result in a negative impact on the availability of foreign currency in the country. On the other hand, locally produced raw material fulfils the international standard to some extent and the cost is moderately favourable with the mean scores of 3.00 and 3.30 respectively.

In general, the average mean score (3.18) and standard deviation (0.66) showed that the raw material factors contribution to competitiveness of tanning industry in Ethiopia is low to a moderate extent. In line with this, the study finding revealed that the tanning industry competitiveness were influenced by raw material quality and supply related constraints. In order to enhance the competitiveness of the tanning industry in the country, the industry, government and stakeholders need to work in collaboration for producing good quality raw materials that substitute imported raw materials.

Infrastructure determinant factors of competitiveness:

The study further aimed to investigate the availability of infrastructure for the tanning industry. From the findings shown in the Table VI, electricity, communication network, water, port transport facility and port handling and customs processes were moderately available for the tanning industries with the mean score of 3.0, 3.07, 3.46, 3.46, and 2.9231 respectively. This implies that the availability of infrastructure not enough for the industries to be competitiveness in the national and international markets. In line with this, working to provide required physical infrastructure clearly plays an important role in enhancing the productivity, performance and competitiveness of the tanning industries.

Industry and institution linkage determinant factors of competitiveness:

In the study, the existence of related and supported industries in the countries has been considered. Table VII, demonstrated that coordination between institutes and associations, frequent communication with suppliers and customers were moderately favourable with the mean scores of 3.30, 3.23 and 3.15, respectively. However, supporting institutions and association's contribution

Table V

Raw material determinant factors of competitiveness

Descriptive Statistics			
Statements	**N**	**Mean**	**Std. Deviation**
Local raw materials supply (chemicals, etc)	13	2.7692	1.09193
Local raw materials quality	13	2.4615	.77625
Local raw materials cost	13	3.3077	.75107
Dependency on imported raw materials	13	3.0769	1.32045
Local raw material fulfil international standards	13	3.0000	1.08012
Average	13	3.1846	.66564

Source: Research Data (2022)

Table VI

Infrastructure determinant factors of competitiveness

Descriptive Statistics			
Statement	**N**	**Mean**	**Std. Deviation**
Adequate supply of electricity	13	3.0000	1.22474
Adequate supply of water	13	3.4692	.72501
Adequate supply of communication network	13	3.0769	.86232
Sufficient transport to/and from port	13	3.4923	.75107
Fair cost of transport to/and from port is	13	3.2308	.83205
Port handling and customs processes	13	2.9231	1.11516
Average	13		

Source: Research Data (2022)

Table VII

Industry and institution linkage determinant factors of competitiveness

Descriptive Statistics			
Statement	**N**	**Mean**	**Std. Deviation**
Supporting institutions and associations	13	2.6923	0.85485
Coordination between institutes and associations	13	3.3077	0.75107
Frequent communication with suppliers	13	3.2308	0.72501
Frequent communication with customers	13	3.1538	0.68874
Average	13	3.0962	0.40232

Source: Research Data (2022)

Table VIII

Skilled labor determinant factors of competitiveness

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
Supply of skilled labor force	13	2.4615	0.87706
Experienced and export oriented marketing personnel	13	2.3846	0.65044
Continuous training	13	2.5385	1.12660
Capability to handle new technology	13	3.0000	1.08012
Average	13	2.5962	0.57317

Source: Research Data (2022)

for the tanning industry were unfavourable with mean scores of 2.69.

However, the grand mean score (3.09) and standard deviation (0.4) showed that the industry and institution linkage contribution to competitiveness of tanning industry is to moderately favourable (average). In order to improve the industry and institution linkage, the tanning industries, government and stakeholders need to work closely. The presence of effective and efficient related and supported industries will provide benefits such as technology up gradation, innovations, quick information flow and shared new technology, etc.

Skilled labor determinant factors of competitiveness:

Human resources relates to the people that make up an organization's workforce. It is a valuable asset for every organization and a source of competitive advantage for any businesses. It provides organizational capacities and intellectual capital by converting resources like money, machines, processes, and materials into products or services. Human resource competence, which refers to the skills and knowledge of workers and others in an organization's network, remains critical.

The study further requested the respondents to indicate the labor force characteristics within their tanneries. As shown in Table VIX, skilled labor and export oriented marketing personnel, and training were unfavorable to a high extent with mean scores of 2.46, 2.38 and 2.53 respectively. However, capability to handle new technology were favorable to some extent with mean scores of 3.0. In the study, the average mean score of (2.59) and standard deviation (0.57) showed that the skilled labor factors' contribution to competitiveness of tanning industry is unfavorable and implementing different enhancement strategies are necessary. The tanning industries need to work on enhancing their workforce competence and skill through creating different training and experience sharing opportunities.

Government Policy Determinant factors of competitiveness:

Government policy as a factor

Porter stated that the governments play role of catalyst and challenger to companies to raise their aspirations.[14] (Porter, 1996b). As illustrated in Table IX, the country's government's policy on infrastructure, science & technology, business start-up and industry regulation were favorable to some extent with the mean scores of 3.91, 3.58, 3.58and 3.5385, respectively. Similarly, the county's

Table IX

Government Policy Determinant factors of competitiveness

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
Government policy on human resources	13	3.3846	1.04391
Government policy on Science & Technology	12	3.5833	0.90034
Government policy on infrastructure	12	3.9167	1.08362
Government policy on demand stimulation	12	3.4167	1.08362
Government policy on business start-up	12	3.5833	0.90034
Government policy on protectionism	13	2.5385	0.96742
Government policy on taxes	13	3.0769	1.03775
Government policy on industry regulation	13	3.5385	1.05003
Political environment	13	2.4615	1.39137
Average	12	3.2427	0.79925

Source: Research Data (2022)

government policy on demand stimulation, human resources and taxes contribution to the competitiveness of the tanning industry were moderately favorable with mean scores of 3.41, 3.38 and 3.07, respectively. However, the government policy on protectionism and political environment were unfavorable with the mean scores of 2.53 and 2.46, respectively. The study grand mean score (3.24) and standard deviation (0.79) showed that the government's policy contribution to competitiveness of tanning industry is too moderate and requires attention.

Capital and Managerial capability Determinant factors of competitiveness:

Table X indicated that the tanning industries are facing lack of financing to acquire loans which is due to the complexity of loan processing procedures and collateral requirements from banks and other lending institutions. The tanning industry relatively have skilled and experienced manager's that have a capability in planning and making effective decisions for the success of the firm.

Table X

Capital and Managerial capability Determinant factors of competitiveness

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
Financial institution give priority to facilitate the required loan	13	3.3077	0.94733
The collateral requirement for lending institutions is one of the hindrances to obtaining a loan	13	3.5385	0.66023
Loan processing procedures of banks and other lending institutions are too complicated and time consuming	13	3.5385	0.77625
There is lack of financing to acquire new technology because it requires huge investment	13	4.0769	0.86232
Educational readiness and capability of managers to help them in planning and making effective decisions for the success of the firm	13	3.3077	0.75107
There are well skilled and experienced managers available in your organization	13	3.1231	0.86232
Your organization manager has a world market idea or exposure	13	3.2231	0.75955
Average	13	3.6593	0.27688

Source: Research Data (2022)

Table XI

Competitiveness measure factors

Descriptive Statistics			
	N	**Mean**	**Std. Deviation**
Due to export competitiveness your company maintains its comparative advantage	13	3.6154	0.76795
My company derives sufficient income from domestic and international markets	13	3.6923	0.85485
My company maintains, or expands, a place in international markets	13	3.6154	1.19293
My company has access to new technology, new ideas and subsequent productivity growth	13	4.0000	0.81650
Ethiopian leather product earns a higher price in the international market than its competitors	13	3.0000	1.00000
Ethiopian leather is preferred over its competitors in the international market	13	3.6923	0.85485
Average	13	3.6026	0.50249

Source: Research Data (2022)

Competitiveness Measure factors

Table XI, demonstrated that the mean scores for the six items under the competitiveness ranges from 3.0 to 4.0. All means fall above the mean score of three on a five point Likert scale. As the entire mean scores fall on the average to a moderate extent range (3.0 to 4.0). However, the grand mean score of 3.6 (SD = 0.5), this shows that all the factors under competitiveness measure are favorable to high extent to the competitiveness of the industries under this study.

Conclusion

The study results revealed that the competitiveness of the tanning industry in the country is overwhelmed by several challenges. Based on the study findings, most influential competitiveness factors include lack of strong supporting industries, infrastructure, capital access, managerial capability, poor industry and institution linkage as well as factors such as scarcity of skilled labor and raw materials (chemicals and spare parts). With these constraints, it is unable to compete in the worldwide market owing to its inability to produce high-quality products. This study also provided recommendations on how to improve the competitive performance of the tanning industry.

Competing interests

The authors declare that they have no competing interests.

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