EXPORT MARKETING STRATEGIES OF COFFEE IN INDIA AND ETHIOPIA

By
SHIFERAW MITIKU TEBEKA
(2012-25-101)

THESIS
Submitted in partial fulfilment of the requirement for the degree of

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Faculty of Agriculture
Kerala Agricultural University, Thrissur

DEPARTMENT OF RURAL MARKETING MANANAGEMENT
COLLEGE OF CO-OPERATION, BANKING AND MANAGEMENT
VELLANIKKARA, THRISSUR - 680 656
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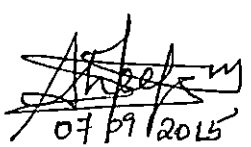
DECLARATION

I, hereby declare that this thesis entitled **"Export Marketing Strategies of Coffee in India and Ethiopia"** is a bonafide record of research work done by me during the course of research and that it has not been previously formed the basis for the award to me of any degree, diploma, fellowship or other similar title, of any other University or Society.



Vellanikkara

Shiferaw Mitiku Tebeka

(2012 - 25 – 101)

CERTIFICATE

Certified that this thesis entitled **"Export Marketing Strategies of Coffee in India and Ethiopia"** is a bonafide record of research work done independently by **Mr. Shiferaw Mitiku Tebeka (2012-25-101)** under my guidance and supervision and that it has not previously formed the basis for the award of any degree, diploma, fellowship or associate ship to him.

Vellanikkara

7/09/15

Dr. Ushadevi K.N.
(Chairperson, Advisory Committee)
Associate Professor & Head of Department
Department of Rural Marketing Management
College of Co-operation, Banking and Management
Kerala Agricultural University
Vellanikkara, Thrissur – 680 656

College of Co-operation Banking and Management
Vellanikkara
KAU P.O.
Thrissur - 680 656
Date.....
Kerala Agricultural University

CERTIFICATE

We, the undersigned members of the Advisory Committee of **Mr. Shiferaw Mitiku Tebeka (2012-25-101)** a candidate for the degree of **Ph.D of Science in Cooperation and Banking** with major field in **Rural Marketing Management,** agree that the thesis entitled **"Export Marketing Strategies of Coffee in India and Ethiopia"** may be submitted by **Mr. Shiferaw Mitiku Tebeka** in partial fulfilment of the requirements for the degree.

Dr. Ushadevi K.N.
Associate Professor & Head,
Department of Rural Marketing Management
College of Co-operation, Banking and Management
Kerala Agricultural University, Thrissur
(Chair Person)

07/09/2015

Dr. P. Shaheena
Associate Professor & Head,
Department of Development Economics
College of Co-operation, Banking and Management
Kerala Agricultural University, Thrissur
(Memeber)

7/9/15

Dr. E. Vinaikumar
Associate Professor & Head,
Department of Cooperatives
College of Co-operation, Banking and Management
Kerala Agricultural University, Thrissur
(Memeber)

7/9/2015

Dr. A.M. Jose
Associate Professor & Associate Director of MBA
(Agri Business Management)
College of Co-operation, Banking and Management
Kerala Agricultural University, Thrissur
(Memeber)

7/9/15

Dr. S. Krishnan
Associate Professor & Head,
Department of Agricultural Statistics
College of Horticulture
Kerala Agricultural University, Thrissur
(Memeber)

External Examiner

7/9/15

Dr. K.P. MANI
Professor
Department of Development Economics, John Mathai Centre
Calicut University

College of Co-operation Banking and Management
Vellanikkara
KAU P.O.
Thrissur - 680 656
Date.....
Kerala Agricultural University

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Shiferaw Mitiku Tebeka

CONTENTS

ABBREVIATIONS

ACRONYMS AND ABBREVIATIONS

ACDI/VOCA: Agricultural Cooperative Development International and Volunteers in Overseas Cooperative Assistance
ACE: Agricultural Cooperatives in Ethiopia
ADF: Augmented Dickey Fuller
ARCH: Auto Regressive Conditional Heteroscedastic
CAGR: Compound Annual Growth Rate
CIA: Central Intelligence Agency (US)
CSA: Central Statistics Agency
CV: Coefficient of Variation
ECEA: Ethiopian Coffee Exporters Association
ECX: Ethiopian Commodity Exchange
ETD: Electronic Theses and Dissertations
EU: European Union
GAIN: Global Agricultural Information Network
GARCH: General Autoregressive Conditional Heteroscedastic
GDP: Gross Domestic Product
GIS: Geographic Indication System
GOE: Government of Ethiopia
GOI: Government of India
HHI: Herfindahl–Hirschman Index
HQ: Head quarter
ICO: International Coffee Organizations
ICT: International Trade Centre
IMLVT: International Multi Location Variety Trial
ITC: International Trade Centre
JML: Johanson Maximum Likelihood
MOA: Ministry of Agriculture
MOT: Ministry of Trade
NMCX: National Multi Commodity Exchange of India Limited
OAU: Organizations of African Union
OCFCU: Oromia Coffee Farmers Cooperative Union
OLS: Ordinary Least Squares
SCFCU: Sidama Coffee Farmers Cooperative Union
SPSS: Statistical Package for Social Sciences
UK: United Kingdom
UN: United Nations
UNECA: United Nations Economic Commissions for Africa
URT: Unit Root Test
US: United States
USD: United State Dollar
WDI: World Development Indicators
WTO: World Trade Organizations

INTRODUCTION

CHAPTER ONE

1. INTRODUCTION

The nation's economic growth and development depends on international trade (Marshall, 1890). Nurkse (1961) declared that, international trade as the engine of economic growth. The export growth and economic growth of a country have a very close relationship. If exports grow at a faster rate compared to imports it will lead to increased economic growth, improvement in balance of payments, increased foreign exchange reserves resulting in increased purchasing power of the country.

The economic advantages retained from export marketing subjected both developing and developed nations to involve in it. However, export market is a tough place to explore with challenges including the understanding of the strategies on how to supply and satisfy the international customer. Strategically positioning a product in the international customers' mind can play prominent role for a marketer to compete in the global arena. Thus, countries need to create and sustain export strategies that will foster the growth and development as well as exploit commercial opportunity for the nation.

The flow of international trade has become the subject of a great deal of research. This is mainly because, exports from a country not only represent a way to achieve economic growth, but also provide foreign exchange earnings needed to import the capital and intermediate goods for domestic production and debt servicing obligations (Lord, 1991).

Export marketing of agricultural commodities like coffee plays a significant role in changing the lives of both rural and urban population, particularly those who are involved in the production, processing and marketing of those commodities.

Coffee is one of the world's most widely traded commodities, after crude oil, and is the most sought commodity in the world (Eric Goldschein, 2011), accounting for trade worth approximately US$ 16.5 billion in calendar year 2010. This puts coffee ahead of commodities like Natural Gas, Gold, Brent, Oil, sugar and Corn. Coffee is grown in over 60 countries across Asia, Africa, South America, Central America and the Caribbean. Many of these countries are heavily dependent on coffee, which account for over 50 percent of their total export earnings. It provides a livelihood for over 125 million people around the world

and it is particularly important for smallholder farmers who produce most of the world's coffee (Fair Trade Foundation, 2012).

Depending on agro-ecological variables existed in the coffee growing countries there are different flavours and varieties of coffee in the world. However, despite the different flavours and varieties of coffee, only Arabica and Robusta are the two main varieties which are commercially grown and sold as coffee beans. Globally, Arabica is the more common type of bean grown accounting for 70 percent of coffee production, and it is considered as more flavourful. Robusta is hardier and cheaper and most commonly seen in instant coffee jars (Eric Goldschein, 2011).

Almost 90 percent of the world's coffee production is mainly from Brazil, Vietnam and Columbia, followed by Indonesia, India and Ethiopia (Shiferaw and Lurleen, 2005) and 90 percent of its consumption takes place in industrialized nations (North America, Europe and Japan) account for nearly 90 percent of world trade in coffee) (FAO [n.d]).

Worldwide, Coffee is mainly produced in Brazil, Columbia, Mexico, Honduras, Castalia, Peru etc, in African countries like Ethiopia, Uganda, and similarly in Asian countries like Vietnam, Indonesia and India. Out of the total world coffee production, Brazil is on top while India and Ethiopia stand at 5^{th} and 6^{th} position during the year 2010 and 2011 (ICO.2012). Brazil, Vietnam and Columbia are the three major coffee suppliers in the global market, accounting for 55 percent of the world's coffee [Brazil (32–34 percent), Vietnam (12 –13 percent) and Colombia (8–9 percent)] hence, they command the world coffee market. Therefore, any change in production pattern of coffee in these three countries, influences the international market prices. In 2010 the International Coffee Organization (ICO) estimated that the total coffee sector employment at about 26 million persons in 52 producing countries. For many countries, coffee exports not only are a vital contributor to foreign exchange earnings, but also account for a significant proportion of tax income and gross domestic product. For eight countries the average share of coffee exports in total export earnings exceeded 10 percent in the period 2005–2010 [Timor-Leste (70 percent), Burundi (62 percent), Ethiopia (34 percent), Rwanda (28 percent), Honduras (21 percent), Nicaragua (18 percent), Uganda (17 percent), and Guatemala (13 percent)] (International Trade Centre, 2011).

Globally there are April group, July group and October group coffee growing countries. Both India and Ethiopia categorized under the list of October group coffee producing countries. The total coffee production for the year 2011/12, Ethiopia accounted for 0.42 million tons and India accounted for 0.35 million tons being the third and the fourth top coffee producing countries from October group, respectively next to Vietnam (1.32 million tons) and Colombia (0.51 million tons) (ICO.2012).

The countries in Asian continent like Vietnam, Indonesia and India are the prominent source for coffee export market. For the year 2011 the total coffee production from Asian continent accounted for 2.3 million tons; of which 56 percent was from Vietnam, 23.24 percent from Indonesia, and 15 percent from India and the remaining 6 percent from other Asian coffee exporting countries Viz., Thailand, Lao People's Democratic Republic, Philippine, Yemen, Timor-Leste, Srilanka and Nepal. From the total volume of coffee produced in the continent, about 8.6 percent were exported for the year 2011. However, majority of coffee exported from the continent were from Vietnam (58 percent), Indonesia (20 percent) and India (19 percent).

Table 1.1: Leading coffee producer and exporter countries in Asia and Africa continents (Units in million KGs)

Asian countries	Year	Total production	Total Export	Percentage of Exports	African countries	Total production	Total Export	Percentage of Exports
Vietnam	2012	1590	1372	86	**Ethiopia**	420	192	46
	2011	1200	1061	88		390	159	41
	2010	1168	854	73		450	199	44
Indonesia	2012	783	643	82	**Uganda**	233	161	69
	2011	495	370	75		193	189	98
	2010	548	329	60		197	159	81
India	2012	298	303	102	**Côte d'Ivoire**	124	115	93
	2011	319	350	110		96	46	48
	2010	301	278	92		59	103	175

Source: Consolidated data from ICO database, 2012

Likewise, Ethiopia, Uganda and Côte d'Ivoire play a prominent role on the African countries being the three top leading coffee producing countries with a total production of 0.42 million tons, 0.23 million tons, and 0.12 million tons, respectively for the year 2012. Similarly, Ethiopia, Uganda and Côte d'Ivoire were the top three coffee exporter countries in Africa by

exporting 44 percent, 81 percent and 175 percent, respectively of their total production of coffee for the year 2010. From the year 2010 to 2012 total coffee exported from Ethiopia witnessed a negative incremental growth of -13 percent while, India witnessed a positive incremental growth of 26 percent in the volume of coffee exports (ICO 2012).

In terms of monetary value, coffee is one of the most important globally traded commodities and is critically important to millions of rural households throughout the world (FAO.2006). According to FAO (2007), Coffee was the world's seventh-largest legal agricultural export by value in 2005 and the second most valuable commodity exported by developing countries, from 1970 to 2000 (Pendergrast and Mark. 2009).

It is also one of the predominantly export-oriented commodities in India where, 65 percent to 70 percent of coffee produced is exported with a tune of about Rs. 4000 million (Gurusamy and Purinat.2015). Similarly, an average of 48 percent of the total coffee production in Ethiopia from the year 1980-2010 exported and the remaining 52 percent domestically consumed. Beyond export earnings from coffee, the coffee sector plays significant contribution on creating high employment opportunity and it is evident from the fact that more than 600,000 persons are directly employed and an equal number of individuals get indirect employment (Gurusamy and Purinat. 2015).

1.1. Coffee market in India

Agriculture plays a significant role in the Indian economy as foreign exchange earner through export of agricultural commodities like tea, cotton, coffee, jute, fruits, vegetables, spices, tobacco, sugar, oil, cashew kernels, etc.

The percentage share of agricultural export earning to the total exports from India witnessed a decreasing trend from 17.9 percent in 1991 to 13.5 percent in the year 2001 (Sunny Thomas and Waheeda S. 2012) and continued its trend to 10.6 percent for the year 2010. Similarly, the contribution of agriculture sector to the GDP of India witnessed a decreasing trend from 35.7 percent in 1980 to 29.5 percent in 1990; 22.5 percent in the year 2000 and later it fells to 13.7 percent for the year 2012-13 (Domain-b. 2011).

For the year 2012-13 India exported coffee to over 45 countries and over 50 percent of the export headed to Europe (NMCX, [nd]). Among the major export destinations of Indian

coffee for the past three decades, Russian federation is the largest market for Indian coffee followed by Italy, Germany, US and Japan markets.

During post-independence period Indian coffee emerged as an important export commodity, and currently India accounts for 4.5 percent of the global coffee production. In 2011, India exported a total of 0.34 million tons of coffee (including re-export), earning foreign exchange of US$ 1048.5 million (Coffee Board of India, 2012). The traditional coffee growing areas of India comprise of Karnataka, Kerala and Tamil Nadu, with Andhra Pradesh, Orissa and the North Eastern Region constituting the non-traditional areas (Coffee Board, 2012).

Before market liberalization the Indian coffee market was managed by Coffee Board of India however, after the implementation of market liberalization the Indian coffee export market is backed by the facilitating work of Coffee Board of India, responsible for the promotion, research and consultancy services both for coffee growers and coffee exporters.

About seventy percent of India's population, 56 percent of its income, 64 percent of its expenditure and 33 percent of its savings come from rural India. Therefore, it is worthy to deal in marketing of rural produce to bring the rural Indians life in a comfortable driver seat through designing appropriate export marketing strategies (Kashyap. 2012).

1.2. Coffee market in Ethiopia

Ethiopia is a country in the eastern part of the African continent with a total population size of 96.63 million and almost 80 percent of the population lives in rural part of the country. According to the World Bank estimates for the year 2014 about 47.7 percent of the Gross Domestic Product (GDP) of the Ethiopian economy dependent on agriculture, 41.9 percent based on services while the Industry sector accounted for 10.4 percent.

Trade also plays an increasing role in the share of the GDP of the country. According to the World Integrated Trade Solution (2012) the percentage share of trade[1] to the GDP of Ethiopia for the year 1995 accounted for 25.42 percent and has increased to 36.35 percent in the year 2000, to 51.09 percent in 2005 and accounted for 46.17 percent for the year 2012.

Agriculture is the country's most promising resource sector since most of other economic activities are dependent on the agriculture sector, such as marketing, processing, and export

[1] Trade is the sum of exports and imports of goods and services measured as gross domestic product (GDP)

of agricultural products. Ethiopia is popular for the export of commodities like coffee, gold, leather products, live animals, oilseeds and khat. Most importantly, the trade of Ethiopia is highly dependent on the export of agricultural products and mainly coffee as the prime export commodity. It is the largest foreign exchange earner with a contribution of 25 percent of the country's total export earnings for the year 2013 and it serves as a means of generating income for about 25 percent of the population (National Centre for Trade and Information. 2013).

Ethiopia is the largest producer of coffee in Sub-Saharan Africa and is the fifth largest coffee producer in the world (next to Brazil, Vietnam, Colombia, and Indonesia), contributing about 7 to 10 percent of the total world coffee production. Ethiopia accounts a market share of 5 percent of the total global coffee production and 2.8 percent of the total global coffee export being the 1st top in Africa and 5th in the world in terms of production and the 1st top in Africa and 10th in the world in terms of export for the year 2012 (ICO. 2012).

Among the major export destinations of Ethiopian coffee for the past three decades, Germany is the largest market for Ethiopian coffee followed by Japan, USA, Saudi Arabia, and France markets.

Unlike Coffee Board of India to regulate and facilitate the marketing of coffee by growers and exporters, coffee market in Ethiopia is being regulated by various government agencies such as Coffee and Tea Authority, Ministry of Trade, Ethiopian Commodity Exchange and also Ministry of Agriculture which are responsible for ensuring the smooth marketing of Ethiopian coffee in the international market. However, there is no such organized body yet responsible for the marketing, research and extension, and consultancy; rather exporters had to face different government office for the export.

According to the World Bank (2013) estimates, agriculture is considered as the foundation of the Ethiopia's economy, accounting for nearly half of (47 percent) the GDP of the country (2013). It accounted for 83.9 percent of exports, and 80 percent of total employment, whereas, service and the industry sector accounted for 42.2 percent and 10.8 percent respectively. Therefore, dealing with marketing of rural products like coffee from such a developing country can play prominent role in the social and economic development of the nation.

1.3. Statement of the problem

Among the major coffee exporting countries in the world, Ethiopia is the fifth largest producer of coffee after Brazil, Vietnam, Colombia and Indonesia and the first in African continent for the year 2010 (ICO, 2010). Coffee constitutes an important part of Ethiopia's foreign exchange earnings, tax income and gross domestic product (Gole, *et al.*, 2002). Coffee also directly supports the livelihood of more than 25 percent of the population, and is at the centre of social and family life (Roussel and Verdeaux, 2007). Therefore, coffee has enormous economic, social and environmental significance in Ethiopia. Despite its distinctiveness and reputation for excellence, Ethiopian coffee has been sold as a commodity like most coffees worldwide without undertaking value addition. In addition to this, according to the statistical data of International Coffee Organization, the Ethiopian coffee export fell almost by half for the year 2011, this was due to several factors which are responsible for the decrease in the volume of exportable coffee. The exporting of coffee in bulk with container without taking into account the quality and geographical aspects of coffee in the export market supply chain may be one of the reasons which lead to decrease the volume of coffee export during the year 2011. Coffee producers in Ethiopia have historically received a very small share of the export price of green coffee. A study conducted by Worako (2008) stated that, heavy government intervention, and high marketing and processing costs are the reasons behind the decrease in the volume of coffee exports. Despite the existing export marketing environment in the Ethiopian coffee industry attaining sustainable improved income from coffee export

Without proper understanding and designing of export marketing strategies of the Ethiopian coffee exporters attaining sustainable income and heading the tough competition in the international market will be challenged. More to this, the dynamic nature of export marketing particularly differences in the test and preferences of consumers with different culture, language, politics religion and geography need a thorough examination for a better understanding of export marketing strategies.

Likewise, India is the sixth largest producer of coffee in the world and the third as the Asian continent next to Vietnam and Indonesia having a contribution of 4.5 percent of the world coffee production for the year 2010. Since 1995, India is a member of World Trade Organization (WTO) and one of the roles of WTO is to give special focus to specialized help for export promotion of member countries (WTO, 2012). In this regard, India has

implemented market liberalization policy since 1991. Assessing the trend of such structural change in the export market would help to identify areas where marketing strategies need to gear accordingly. Despite India being the member of WTO, the exportable coffee production performance of India is less than Ethiopia in terms of quantity over the years (from the year 2007/8 to 20010/11). It is evident (ICO, 2012), that the exportable production of coffee in India decreased from 0.29 million tons in the year 2003/4 to 0.18 million tons and 0.20 million tons during the year 2007/08 and 2009/10, respectively. While, the performance of exportable coffee production in Ethiopia increased from 0.13 million tons in 2003/4 to 0.20 million tons in 2007/08 and it increased to 0.24 million tons during the year 2009/10 (See Table 4.1). Attempts were made to identify the responsible factors for the increasing and decreasing trend in the quantity of coffee export from India and Ethiopia.

Based on the historical statistics of ICO the growth rate of coffee export noted in India and Ethiopia from the year 2005/06 to 2010/11 was low. Coffee export market growth rate of India from 2005/06 to 2010/11 accounted for 1.57 percent whereas, Ethiopia accounted only for 0.58 percent. It also shows there is fluctuation in the quantity of coffee exported and the market growth rate is either low or negative in India. It was noted that, the total quantity of coffee exported from India was negative; from the year 1992/3 to 1993/4 accounted for annual average growth rate of -2.1 percent, and it also witnessed negative incremental growth of -10.9 percent, - 5.0 percent, -8.2 percent and -3.7 percent from the year 1996/7-1997/8, 2000/1-2001/2, 2004/5-2005/6 and 2008/9-2009/10, respectively (see Table 4.3).

Additionally, major portion of coffee exported from India is in the form of green coffee instead of processed coffee, which green coffee fetches a price lower than that of processed or value added products of coffee. As a result, the growers and exporters are not getting maximum profit in spite of being one of the largest producers of coffee beans (GOI. 2011). More to this, the share of coffee export from the total agricultural export witnessed a negative incremental growth in the two countries.

The perfect export marketing strategy of today's market will not be hold for tomorrow's market due to the dynamic nature of consumers' needs and demand as well the existence tough competition in the international market. Thus, it is very important to pay attention to design export marketing strategies that would address the change in the consumers need and perception in the export market in order to export the right product to the right target market in order to realise the maximum benefit in the competitive export market. Considering their

(India and Ethiopia) export market share in Asian and African continent, the present study would serve as a model coffee export marketing strategy for African and Asian countries.

1.4. Objectives of the study

The general objective of the present study was to assess the export marketing strategies of coffee in India and Ethiopia.

The specific objectives of the study include:

- to analyse the trend and composition of coffee exports of India and Ethiopia;
- to identify major determinants of coffee export in India and Ethiopia;
- to critically examine the export marketing strategies of India and Ethiopia and
- to suggest appropriate coffee export marketing strategies for both countries.

1.5. Hypothesis

In the study the following hypothesises were tested qualitatively and quantitatively

a) **Hypothesis (H1):** There is positive incremental growth in the trends and compositions of coffee exports from India and Ethiopia for the past three decades.
b) **Hypothesis (H1):** There is similarity in the variables determining export marketing of coffee in India and Ethiopia
c) **Hypothesis (H1):** There is market integration between prices paid to Arabica Coffee growers and Robusta coffee growers

1.6. Study Rationale

Understanding the existing coffee export marketing strategies of Indian and Ethiopian export firms against competitors' strategy would help to comprehend the dynamic business environment in the export market. Thus, it is crucial to understand the existing marketing strategies in order to design appropriate marketing strategies for Indian and Ethiopian coffee exporters.

The different export target markets of the two countries were considered in designing the marketing strategy that would help to bring these findings into the wider policy arena. The main rational of the study was that, due to the tough competition in the export marketing, the

changing taste and preference of customer from time to time and, place to place export marketing strategies of coffee exporting firms need to be revisited to cope with the existing and future changes in the market environment. Revisiting of marketing strategy of a firm helps to comply with the recent market trend and to respond the needs of international customers accordingly.

The focus of the study was to explore how Indian and Ethiopian coffee exporters can sustain the competition in the export market and in realizing better benefit by exporters and participants in the coffee export supply chain. The output of this research will be a part of sets of tools which can be used by coffee exporters, coffee growers, academics, rural marketing professionals, agribusiness sector, policy makers and other stakeholders to improve the economic benefits realised from coffee export. The study seeks to add knowledge on how to develop viable and compatible marketing strategies for export firms in in Asian and African continent particularly in India and Ethiopia. The present study explored the major determinants of coffee export, analysed the trends of export and examined the export marketing strategies in India and Ethiopia.

1.7. Limitations of the study

Sample size was perceived to be small which can affect the result negatively. Generally, the smaller the sample size, the higher probability to send wrong signals to policy makers. This was mainly because; the proposed sample size were drawn from the total exporters (up to the year 2009) in spite of the year to year increase in the number of exporters without increasing the proposed the sample size. Furthermore, the study was limited to interacting mainly with Indian and Ethiopian coffee exporters however; the involvement of coffee growers in such study would have brought a more insight about the sector. Due to unavailability of consistent national and international level time series data; some of the variables considered in the present study were analysed using the limited available time series data from authenticated sources. The study was limited to analysing the trends of organic and fair trade practices of coffee in the two countries due to unavailability of time series data.

1.8. Study organization

The final output of this study is organised into an academic thesis, which contains five chapters. The first chapter gives introduction, problem statement and the research objectives including hypothesis, the study rationale and limitation of the study. The second chapter

presents literature review on basic concept of marketing and export marketing, export marketing strategies, components of export marketing strategy, strategies for selected export target markets of India and Ethiopia; WTO and trade agreements and determinants of export performance. The third chapter states the research methodology (includes research paradigm and methods), which can be used to operationalise the study. Chapter four presents objectives' result and discussion. Chapter five gives a summary and conclusion of the major findings and proposals for general and policy recommendations including future research areas.

REVIEW OF LITERATURE

CHAPTER TWO

2. LITERATURE REVIEW

The purpose of this chapter is to give an insight on key emerging findings on the theoretical background, gap in the existing literatures and related assessments in order to substantiate the necessity of the current work. The chapter critically reviews literature on export marketing strategies of different product export firms and coffee export firms in particular. The first section of the chapter gives important definitions of common concepts of marketing and marketing strategy. Subsequently, literatures on export marketing strategies, components of export marketing strategy, export marketing strategies for selected export target market of India and Ethiopia, WTO and trade agreements and determinants of export marketing were reviewed.

2.1. Definition of Marketing and Export Marketing

2.1.1. Marketing

There are plenty of definitions on marketing in the existing literatures. Marketing is not as simple as the process of selling and buying of a particular product or service. Earlier writers limited marketing only to exchange; considered it only as information gathering and communication. Later writers extended the scope of marketing to other functions involved in connecting production and consumption of product or service. As a matter of fact a product has to pass through various stages before it reaches the consumer in the final form for consumption. Considering the various stages, Dahl and Hammod (1977), defined marketing as a sequential series of functions that need to be performed as the product moves from its point of primary production to ultimate consumption. Kohls and Downey (1979) also follow the same theme and defined marketing as "the performance of all business activities involved in the flow of goods and services from the point of initial agricultural production until they are in the hands of the ultimate consumer".

According to Purcell (1979), marketing is nothing more than one dimension, an ongoing process within the exchange system that seems to bridge the gap between producer and consumer. He defined it as a set of economic and behavioral activities that are involved in coordinating the various stages of economic activities from production to consumption.

The American Marketing Association (AMA) (1986), defined Marketing as "the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives".

Abbot and Makeham (1990) defined Marketing as "a management process responsible for anticipating, identifying and then satisfying consumer wants and needs with a view of making profit. It involved transportation to bring the product to the right place, storage to adjust supply to demand over time, sorting, cleaning and processing in various ways.

The above definitions clearly indicate that marketing is an ongoing process which connects the producer and the consumer. However, to include all types of definitions of marketing; the researcher developed the following definition as the foundation of the present study.

Marketing is a management process of adding value to the customer through anticipating, identifying and satisfying their needs and wants and ensuring the smooth flow of goods and services from the point of initial production to ultimate consumer taking the nature of the product into account with a view of making profit.

2.1.2. Export marketing strategy

Cavusgil and Zou (1994) defined export marketing strategy as "the means by which a firm respond to the interplay of internal and external forces to meet the objective of the export venture. It involves all aspect of marketing plan that including product, promotion, pricing, and distribution".

Traditionally, the meaning of marketing strategy is a plan for pursuing the firm's objective or how the company is going to achieve its marketing goals within a specific market segment (Theodosio and Leonidou, 2003; Orville and Walker, 2008; Kotler and Amertrong, 2009). The scope of marketing strategy is specifying the target markets for a special product or product line. Firms seek competitive advantage and synergy through a well-integrated program of marketing mix elements (Orville, Walker 2008). Brodrechtova (2008) explained that marketing strategy is a roadmap of how a firm assigns its resource and relates to its environment and achieves corporate objective in order to generate economic value and keep the firm ahead of its competitors.

Marketing strategy is a procedure by which companies react to situations of competitive market and forces of market or react to environment forces and internal forces to enable the firms to achieve its objective and goals in the targeted market, through all aspects of the marketing mix, that consist of products, prices, promotion, and distribution (Lee and Griffith 2004 and Slater *et al.*, 2009).

The researcher concluded that Export Marketing strategy is the road map for exporter to view and follow how the export firms responds to the micro and macro marketing environmental forces by the use of marketing mix elements that include product, price, promotion, place in order that supply and achieve firms objective.

2.2. General overview of export marketing strategies

There is a growing body of literature on export marketing strategies from international marketing perspectives that provides a platform for discussing how Indian and Ethiopian coffee exporters can develop and intensify their business to improve their export performance and contribute to the economic growth of the two countries. However, in the present study of this chapter, instead of international marketing more emphasis was given to export marketing perspective.

The main factors affecting export behavior are usually divided into two major groups; external and internal (Reid, 1981). The first group is related to environmental factors like tariffs and quotas, exchange rates, financing possibilities, expected profitability, government assistance, legal framework, competition both domestically and abroad and market characteristics like the size, sales and growth. The second group refers to firms' characteristics and products like competitive price and quality, cheap labour costs and cheap raw materials.

The diffusion of innovation perspective provides an insight for the adoption process of new products and the different characteristics of customers along the diffusion (Rogers, 1983). An innovation may be in a different diffusion phase at various markets. Thus, when cultures are similar, exporters may learn from their experience in their home markets and accelerate the innovation acceptance in the export market.

A study on institutional aspects of marketing strategy for avocados which was conducted by Johan (1988), concluded that in order to be successful in the long run, any marketing strategy

should be orientated towards the needs and preferences of the consumer and also information regarding the target market is the key to higher profits and success.

Cavusgil and Zou (1994) in their study, argued that the properties and uniqueness of a product can have an influence on its competitive positioning as well as the ability to enter a new market.

If a product is successful in a domestic market, one strategy for export success may be a careful analysis of why it sells in that particular market, followed by a selection of similar markets abroad. In this way, little or no product modification is required. Formulating an export marketing strategy based on export marketing plan (assembling facts, constraints, and goals and, then creating an action statement that takes all of these into account), good information and proper assessment increases the chances that the best options will be chosen, resources will be used effectively, and efforts will consequently be carried through to completion (Shaoming, 1997).

The international product cycle argument (Vernon, 1979), suggested that a firm should seek to expand internationally in order to get incremental profits on its excess capacity (Aulakh and Kotabe, 1997).

Innovation can be related to the product, marketing method or segmentation and service Kotler (1999), and it can also be a source for a differentiation policy and can improve profitability. Similarly Varadarajan and Jayachndran (1999) argue that expanding to foreign markets can justify further investments in innovation.

As firms begin to compete in export markets, their export success depends upon their ability to develop and implement unique competitive strategies. When developing such strategies, export firms have to match their internal and location specific competitive (as explained in Porter, 1998 and comparative advantages (i.e. Ricardian) with the requirements of the external environment in which they compete (Aulakh *et al.*, 2000).

A study by Nargundkar and Bajaj (2002), on international marketing strategies for Indian companies found that providing value added product from the perspective of an Indian firm could be to provide unique tastes, flavours, or "experiences" to global audiences who are bored with the monotony and similarities of their products or experiences.

In addition to firms level export marketing there are also country level export marketing strategies, which are being carried out by ICO as an opportunity to the sector like coffee development projects, specialty coffee, promoting coffee consumption, coffee quality improvement programs and Fair Trade (ICO, 2007). Coffee development projects are one of the main points in the work of ICO, which is made and developed in order to make the lives of farmers better and the industry more successful and improved that could not only bring good coffee to the consumers, but also give a good life to those who grow it. Recently, Specialty coffee is becoming more popular and it has the potential to benefit the coffee industry. Fair Trade is one of strategy that will make life of the farmers better and fairer as to the financial revenues of the growers and is becoming more and more popular these days. Many companies are trying to participate in Fair trade with their products that is giving bigger revenues for the growers from the selling products (ICO, 2007).

A study conducted by Liargovas and Skandalis (2008), on motives and marketing strategies of Greek companies exporting to South-east European markets suggested that in order to increase exports, Greek policy makers should continue to support economic restructuring and stability in the Balkans. Additionally, they should assist Greek firms by various measures to build marketing infrastructure, research and training of personnel.

Edward (2009) conducted a study on strategy factors associated with the export performance of manufacturing firms in Tanzania and he concluded that factors affecting the export performance of a firm may be universal.

A report which was made by Global Agricultural Information Network (2010), indicated that Vietnam's domestic coffee consumption has been increasing due to the effective marketing strategies of coffee producers who started courting the national market through the introduction of several Western-style coffee shops such as Highlands Coffee, Gloria Jean's, The Coffee Bean, Tea Leaf, and Illy. Home use coffee consumption continues to increase as more middle class consumers respond to the coffee industry's increased marketing efforts.

A study conducted by Oyeniyi and Omotayo (2010), on the effect of marketing strategy on export performance: Evidence from Nigerian export companies shows that; the key strategic factors on export and its marketing plan will cover all aspects of the product, promotion, pricing and distribution. The challenge of the strategies to be used is whether it should be standardized or adapted to the conditions of the foreign market. The effects of these strategies

show that the firms' product adaptation, promotion adaptation and the firm marketing position affect the firm's export performance.

Markov chain analysis was employed to analyse the structural change in any system whose progress through time can be measured in terms of single outcome variable (Dent, 1967). Recently, the model was also used by Kusuma and Basavaraja (2014) in order to estimate the exports of mango from India.

A study conducted by Gomez et.al.,[n.d], on export marketing strategies for high exporting performance: evidence from Spanish Companies and the study examined the elements of firms' marketing strategy that explain high exporting performance. The results indicated that there is a significant positive correlation between the level of penetration in foreign markets and marketing strategy. The degree of product adaptation, price competitiveness and type of distribution network are the most discriminating variables of marketing strategy for active exporting firm. However, more weight should be given to the type of distribution network when designing export promotion policies since it is the most explanatory variable.

Eskindir and Asfaw (n.d) analyzed the potential market of China for Ethiopian Coffee and they found that there are four key market variables: product, price, promotion and sell are highly interlinked in dealing about market penetration and they considered as the key strategy to get in to the Chinese coffee market. They further addressed the meaning of the variable as when we take 'product' as the key variable, that is to say the quality of the coffee process from plantation to the expected final destination and its being organic should be highly considered.

2.3. Components of export marketing strategies

According to Cavusgil (1983), export marketing strategy is a construct that can be reduced to four components viz., basic company offering (product), contractual link with foreign distributors/agents, export promotion and pricing considerations.

Thirkell and Dau, (1998); Kotler (2003); Langes and Montgomery (2003); Lee and Griffith (2004); Calantone, *et al.* (2006); Mavrogiannis, *et al.*(2008); Leonidou, *et al.* (2002); Brodrechtova, (2008); Navarro, *et al.*(2009); Slater, *et al.* (2009); explained that, the concept of marketing strategy generally embrace marketing mix elements which consist of product,

price, distribution and promotion and Export marketing mix determines the export marketing strategy (Mavrogiannis, et al., 2008).

In the international marketing research, scholars have applied several dimensions to indicate marketing strategy as export marketing strategy, export strategy or business strategy. However, all these dimensions are based on marketing mix and some scholars add few variables in order to make it more meaningful (Abdul and Sidin, 2010). Especially in export marketing strategy, (Leonidou et al. 2002; Lee and Griffith, 2004; Brodrechtova, 2008; Mohamad *et al.* 2009), had explained that the export marketing strategy elements are product, price, promotion and place.

A review of empirical literatures between the years 1993 to 2010 on the influence of export marketing strategy determinants on firms export performance by Moghaddam et al., (2011), argued that the export marketing strategy elements subjectively can be categorized into four main categories: price-marketing strategy, place marketing strategy, promotion marketing strategy and product marketing strategy.

As part of the theoretical foundation of the present study it is concluded that, components of marketing strategies of a firm is emanated from the basic marketing mix elements viz., promotion marketing strategy, place marketing strategy, product marketing strategy and price marketing strategy.

2.3.1. Product marketing strategy

Products are the goods and services that a firm provides for sale to its target market. However, while developing a product the firm should consider quality, design, features, packaging, customer service and any subsequent after-sales service towards the product. This is mainly because; marketing is integral to the success of a business with its primary focus on quality, consumer value and customer satisfaction using the blend effort of marketing mix as a tool to produce the results it wants to achieve in its specific target market.

Since product is one of the most essential components of the marketing mix, the other elements of marketing mix have no relevance without product. Product quality, standard, grade, brand, package, label, etc, are part of the product dimension.

A study conducted by Dominguez and Sequeira, 1993), revealed that product quality had positive effects on export performance. The findings of a study by Lages *et al.* (2004), was also consistent with the findings of (Beamish, *et al.* 1993; Thirkell and Dau, 1998; Morgan *et al.* 2004), found that quality and service had significant and positive correlate with export performance. However, a study which was conducted by Leonidou, *et al.* (2002), found that product design, packaging and labeling in the industrial market context did not show any significant correlation with performance of export.

A study conducted by Cavusgil and Zou (1994), to investigate the empirical link in marketing strategy and performance relation using in-depth personal interviews with export marketing managers and noted that better export performance could be obtained through adapting the product to meet requirements of export customers.

In various studies considerable attention have been given to product dimensions related to export performance, actual and augmented product factors and they confirmed that it is an important part of marketing mix that influence export performance positively (Cavusgil and Zou, 1994; Thirkell and Dau, 1998; Leonidou, *et al.* 2002;Mavrogiannis *et al.*, 2008)

A study on marketing strategy of export performance which was conducted by Leonidou, *et al.* (2002), found that positive correlation between export performance and product dimensions. They further synthesized their findings on marketing strategy-export performance relationship and concluded that product design, brand mix (name, sign, symbol, design), warranty, customer service as before and after sales services, and product advantages (such as luxury, prestige, and quality) had positive relationship with export performance.

Ponte (2002) argued that producers should keep in mind, the final consumers' preferences and the characteristics of the coffee for which consumers would be willing to pay more than quantity of coffee. Quality coffee provides more revenue to producers and it is a better strategy to earn more revenue for the same quantity of coffee compared to low quality coffee.

Haque *et al.* (2002) in their study about export performance and marketing opportunities of Malaysian ready-made garment products concluded that the best way for better export performance was to enhance diversification of products.

Zou *et al.* (2003) conducted a study on the effect of export marketing capabilities on export performance of Chinese exporters and they concluded that branding advantage influenced the export performance positively.

Lages *et al.* (2004) conducted a study on determinants of export marketing from European perspective based on perceptions of Portuguese and British export managers using an open-ended question and found that product quality and service quality were the major determinants and followed by design, brand image, innovation and product differentiation. Recently, a study by the same authors investigated relationship on capabilities, quality, and innovation as determinants of export performance via a questionnaire through two types of respondents from the same Portuguese firm. They noted that, product quality and product innovation were recognized by academics and managers as top determinants of export performance and product innovation and product quality led to export performance enhancement.

A study on factors influencing export performance in international marketing for Australia firms which was conducted by Ogunmokun and Ng (2004) found that, product differentiation strategy was one of the major factors for discriminating between high and low export performing companies.

According to Abdul-Adis and Sidin (2010), a study on the impact of environmental factors on export marketing performance in Malaysia, found that, product adaption and design strategy did not have direct relation with export performance.

A study on the effect of product adaptation and market orientation on export performance in Thailand which was conducted by Tantong, *et al.* (2010), found that product design adaptation strategy was related to performance positively.

2.3.2. Promotion marketing strategy

Promotion as one of marketing mix element, retained the attentions of many researchers to assess its relationship with export performance to find whether sound promotion would increase sales and export performance.The question of how the communications program of export firm is to be managed is a fundamental part of the strategic marketing task. In deciding how best to do this, the export market planner needs to come to terms with a variety of issues,

including the question of how the communications program can be integrated with the other marketing mix elements in order to achieve the greatest degree of synergy.

Promotion refers to the act of communicating the benefits and value of the firms product to consumers, it also involves persuading general consumers to become customers of the business using different promotional mix such as advertising, direct marketing, personal selling and sales promotion. Thanks to the fast pace in introduction and implementation of e-commerce in the marketing system the world market become one village. However, as a marketer no matter how good a product may be, it does not sell well unless it is backed by adequate promotion. Having a multilingual website from which institutional buyers and distributors foreign customers can order products, make enquiries, or evaluate your product offerings, is an essential information/promotional link to the prospective buyer in the age of e-commerce.

Several attributes of the marketing mix element through which a firm can achieve a competitive advantage at the export target market are getting the attention of majority of the researches. Among these attributes are: segmentation and focus (Porter 1980; Cooper and Kleinschmidt, 1985), competitive price (Christensen *et al.* 1987), supporting the distributor (Bello and Gillil, 1997).

According to Madsen (1987), in many studies where promotion intensity is included, it has been found to be positively associated with export performance when the number of personal visits in the foreign market is used as an indicator and he concluded that, personal contact is the single most important element of export promotion policy, because it is an efficient way of overcoming buyer uncertainty and cultural differences.

A study by Leonidou *et al.* (2002), found that the effect of promotion on export profit contribution was limited, it had a strong influence on intensity and sale growth of export. From all dimensions of export performance, export market advertising (promotion mix element) was considered by many of researchers which examined the advertising procedure. It was found that the company can inform, introduce, remind or encourage consumer and, ultimately generate more sale and enhance export performance. In the review of studies, they divided the promotion related variable to advertising, sale promotion, personal selling, trade fairs, personal visit, and promotion adaption and conceded that all these variables have positive influence on export performance. They concluded that, promotion is associated with

performance positively and firms can be more successful in international market with more intensive use of promotional tools.

The importance of advertising on export performance is recognized from higher sales of firms that used sound advertising and higher performance result for exporters who have a greater commitment to their target market that use higher level of advertising rather than firms who have less commitment that use low level of advertising (Lee and Griffith, 2004).

Lee and Griffith (2004) in their study about marketing strategy-performance relationship in Korea illustrated that, advertising and trade promotion are the two elements of export promotion. From these two elements only trade promotion was evaluated via the rate that firms prepare buying allowance and free goods or discount for overseas distributors or retailers and it was positively connected to export performance. They further concluded that advertising expenditure (the ratio of overseas advertising expenditures to total exports) in overseas was not found to influence the performance of exporter.

Eusebio *et al.* (2007) conducted a study on management perception and marketing strategy in export performance and they found that greater investment in promotional campaigns tools and promotional activities have no significant effect on export performance.

A study conducted by Naidu and Naidu (2009), stated that conducting mango festivals, mango shows, mango exhibitions, and trade missions will create opportunities for processors, traders, distributors, and end-users to increase their awareness and facilitate trade. The researcher further mentioned that mango conferences, Aahar, and symposiums provide an opportunity to exchange information, experiences, and best practices of the industry. New technological developments and innovations related to the development of hybrids, pest and disease control, and ways to extend the life of fresh mangoes will extend to reach the foreign markets.

Naidu and Naidu (2009) positioning mango as a drink, nutritional food, dessert, and snack food is very important in line with the lifestyles of each segment. Branding and brand promotion with several themes need to be explored for creativity and effectiveness. Some examples: "mango is not just mango but it is alphanso from India" celebrity promotion, "I love the king (of fruits) who has captured my heart" such endorsement by Aiswarya Rai, or a sports celebrity will enhance the acceptance of mango taste around the globe. Such promotion may be undertaken as outdoor billboards, or brief presentation in movie theatres along with

popular Indian movies that are widely viewed in the Middle East markets. Similarly, applying such kind of export promotion strategy can play pivotal role in the export performance of Indian and Ethiopian coffee.

Similarly, Abdul-Adis and Sidin (2010), in their research about export performance on Malaysian wooden furniture industry revealed that promotional adaptation has no direct relation with export performance.

According to the coffee exporter's guide, designed by International Trade Centre (ITC) (2011), the promotion of coffee consumption worldwide is vital for the entire coffee industry. Competition from other beverages is intense and the total amount of money spent on advertising of soft drinks, for example, far exceeds the amount spent on coffee. Well-coordinated national and international generic (general) campaigns are necessary not only to encourage people, particularly in emerging markets, to take up coffee drinking, but also to retain the loyalty of existing consumers. This is not to ignore the fact that roasters worldwide invest tens of millions of dollars in brand promotion, the costs of which are estimated to be between 3 percent and 6 percent of total sales. Although such promotion is not generic, it does encourage consumption of coffee in general. Nevertheless, there is a distinct need for the entire industry to engage in generic promotion of the type as undertaken by the ICO in the Russian Federation and China in the 1990s as the campaigns had very positive effects on consumption in both countries.

These all indicates that promotion marketing strategies for export firm is one of the areas where further research is required to examine the impact of promotional efforts made by the export firm on their export performance as well as to test these empirical literatures.

2.3.3. Place marketing strategy

Collaboration of marketing activities with foreign firms (Hirsch, 1971) or domestic firms (Moser and Topritzhofer, 1979), is positively associated with export performance and these results as probably more valid for smaller rather than larger firms. Additionally, effective use of agents is a much more critical success factor for small firms than for large ones.

Bilkey (1982) reported that the optimal amount of dealer support varies based on the type of product/market and the country to which the product is exported. However, He noted an

overall tendency that the greater the amount of dealer support, the greater the perceived relative profitability of exporting.

Distribution, delivery and service are perceived to be important determinants for the success of export marketing, a finding in a study which was conducted by Aaby and Slater (1989), in fifteen export firms.

A study by Style and Ambler (2000) found that distribution channel relationship had a positive effect on performance of export. This was consistent with the result which was recently conducted by Lages *et al.* (2004), about European perspective on determinants of export market with the objective to discuss the main antecedents of export performance based on perceptions of Portuguese and British export managers. They revealed that distribution network availability becomes determinants of export performance.

A study conducted by Leonidou *et al.*(2002) on marketing strategy of export performance found that using export sales representative office and direct purchasing had positive effect on intensity of sales export while, weak relationship is found between export performance and adaption of distributor, agent, and merchant in export market.

Lee and Griffith (2004) explained that exporter channel strategy was imagined as the degree to which a firm applied direct instead of indirect channels for exporting its products and it is evaluated by gathering the ratio of direct exports to local distributors, retailers, and producer in whole exports. They concluded that direct exporting channel would affect export performance positively.

A study which was conducted by Eusebio *et al.* (2007), investigated management perception and marketing strategy in export performance via comparative analysis in Italian and Spanish textile industry. The outcome showed that the commercial branch in export market had positive and significant relations with export performance.

Recently, in export marketing, active and advanced exporters have more control on distribution activities, as well as the time of delivery of the product, and distribution channel (Eusebio *et al.*, 2007).

Eusebio *et al.* (2007) found that the availability of commercial branches of firms in foreign countries seems to relate positively to export performance and it is common for successful export companies to have their own centre.

A study on export of mango from India Naidu and Naidu (2009), stated that better infrastructure facilities and strict enforcement of quality standards have created networking opportunities for exporters.

Abdul-Adis and Sidin (2010) conducted a study on the relationship of export marketing strategy and environmental factors and they concluded that distribution strategy and support to foreign distributers had no direct relations with export performance.

2.3.4. Price marketing strategy

Offering relatively lower price (Price Competitiveness) has produced mixed results in empirical studies giving three different sets of contradictory findings. The first set of studies (Bilkey, 1982; 1985), found that export price competitiveness and performance are negatively associated. Specifically, Bilkey found that charging a high export price as compared to domestic price was positively correlated with export profitability. The second set of studies (Fenwick and Amine, 1979; Kirpalani and MacIntosh, 1980), found a positive relationship between price competitiveness and performance. The third set of studies (Hirsch, 1971; Moser and Topritzhofer, 1979), did not find any association.

Mundlak and Larson (1992) conducted a study of 58 countries for 60 commodities/products using a time series panel data for different qualities of coffee. They concluded that producing countries' commodity policies affect the levels of prices of the commodities but these policies do not prevent the movement of domestic prices with the international prices of those commodities. Coffee is a globally traded commodity; hence producing countries' coffee policies should affect domestic and international coffee prices.

Cavusgil and Zou (1994) found the positive relation between price and export performance. In addition, Eusebio *et al.* (2007), found that confidence in product price had a positive effect on export performance. In contrast, a study by Abdul-Adis and Sidin (2010), on the relationship of export marketing strategy and environmental factors and they concluded that price competiveness have no direct relation with export performance.

Zou *et al.* (2003) investigated the effect of export marketing capabilities on export performance of Chinese exporter. They divided positional advantages to low-cost advantage and branding advantage and they concluded that low-cost advantage had positive relation with performance of export.

Lages *et al.*(2004), found that price competitiveness/value for money is one of the main determinants of export performance. In contrast a study by Eusebio *et al.* (2007), on their finding emphasized that price is no longer a dominant strategy for companies in export market.

A study on the marketing strategy performance relationship in Korea which was conducted by Lee and Griffith (2004) concluded that adjustment of export prices to foreign market situation has a positive influence on the export performance. They further concluded that the adaptation of pricing strategy would increase the performance of export. Pricing strategy that focused on penetrating in to foreign market by offering low price to large number of customers would help to retain high market share. The result revealed that, price penetration strategy was correlated to export performance positively.

Ogunmokun and Ng (2004) in their research about factors influence export performance in international marketing for Australian firms concluded that market skimming pricing strategy was the second major factor in discriminating between high and low export-performing companies.

Currently, the changes in the international market have made pricing strategy increasingly significant for exporting marketing research and practice (Langes and Montgomery, 2005).

2.4. Strategies for selected coffee export target markets of India and Ethiopia

In dealing with export marketing, customers with different culture, language, religion, taste of preference and product perception, marketing research is necessary to breakthrough with the different target market. Accordingly, literatures were reviewed in order to emphasis on how different marketing strategies should be designed for different export target markets of India and Ethiopia.

Bohman and Jarvis (1999) a study on the International Coffee Agreement(ICA): a tax on coffee producers and consumers affirmed that ICA uses the export quotas to restrict coffee

trade in order to increase and stabilize the international price but the use of quota decreased the price realized by the farmers in most of the coffee producer countries

Study which was carried out by the United Nations Food and Agriculture Organization (FAO, 2001), has suggested the need for plummeting the unit cost of production through productivity gains, capacity building of small growers, streamlining marketing channels, improving infrastructure, tailoring marketing activities to individual country's demand, propagating health benefits of tea and promotion of organic tea using the tea mark. This is exactly what the domestic tea companies should do for their long term continued existence.

Study on regulation, markets and consumption in the global coffee chain which was conducted by Ponte (2002), stated the importance of coffee quality rather than the quantity with respect to the producers of coffee. He argued that producers should keep in mind, the final consumers' preferences and the characteristics of the coffee for which consumers would be willing to pay more. Quality coffee provides more revenue to producers and it is a better strategy to earn more revenue for same quantity of coffee compared to low quality coffee.

A study which was conducted by Kolk (2005), on Corporate Social Responsibility in the coffee sector with respect to the dynamics of Multi-National Company (MNC) responses found that retailers in the United State (U.S) pay high prices for quality and certified coffee. Also retailers differentiate and are willing to pay more for Fair Trade coffee. Still coffee producers are facing problems and are not able to realize the benefits of such a strong market. He further argues that coffee consumption has to increase in order to improve the livelihood of the coffee farmers in developing countries.

Export of cars from India is a success story even though it is a very personal item for many consumers across the world. The expectations of the consumers in the developed markets such as the ones in Europe, the US, and the Gulf markets regarding the aesthetics of the car, the design, and the performance standards are very high (Prathap and Michael 2005).

A research which was conducted by Prathap and Michael (2005), suggested that, the main areas which have room for improvement in tea export from India are blending (processing), packaging (tea bags), branding, and marketing. They further added that moving up the value chain from being an agricultural commodity producer to being a marketer of life style and luxury products is a big challenge. However, Tata Tea acquired the Tetley brand of the United Kingdom (UK) and is making sustained efforts at becoming a high value life style

marketer. The researcher further noted that the European markets are very sophisticated and stringent norms for quality and safety standards have to be complied with before a firm undertakes any exports.

Basu and Hicks (2008) conducted a study on Label performance and the willingness to pay for Fair Trade coffee: a cross-national perspective and found that U.S customers are more sensitive towards fair trade coffee compared to German customers. They also found that a coffee brand can be priced higher in the western countries if it is a fair trade coffee brand compared to a conventional coffee brand.

According to National Coffee Association, New York, 2008 on national coffee drinking trends as a general consumption among US population indicated that 55 percent of American adults said that they drink coffee on a daily basis. The amount of gourmet coffee consumption has risen to 17 percent of overall adult population from the 14 percent, that was in 2007. The data also shows that the coffee consumption rose to 47 percent among adults of the age group 25-39. Among American drinkers of age 25-59 the results shows that 19 percent of this age group love to enjoy gourmet coffee drinks daily.

A study by Naidu and Naidu (2009), recommended that, since promotional budgets are limited, it is advisable to prioritize target markets and focus in creating significant inroads into the target market(s). For example, Japan is the second largest economy in the world and depends on food imports from all over the world. Working closely with Foodex Japan, understanding their food laws and regulations, improving product quality, and processing standards to meet or exceed the expectations of the quality conscious of Japanese consumer is critical to gain a foothold and make sustainable progress in the Japanese market.

Lee and Gómezl (2011) conducted a study on the impacts of the end of the Coffee Export quota system on International-to-Retail Price transmission and he found that United States retail coffee prices are the most receptive to the international coffee prices as compared to the France and Germany. That means changes in the international coffee prices affect coffee retail prices in the United States more than they do in Germany and France.

A study which was conducted by Rotaris and Danielis (2011), on willingness of Italian consumers to pay for fair trade coffee found that Italian coffee consumers are willing to pay a premium price for fair trade coffee over conventional coffee but this characteristic can vary

with other demographic factors such as age, income, gender etc. For example housewives, retired consumers and less educated and young consumers tend to buy cheaper coffee brands.

Although many Western European countries have traditionally consumed high quality coffees, in recent years the specialty coffee concept has gained considerable acceptance amongst European consumers. Competition from other beverages (soft drinks among young people) has also been an important factor affecting the demand for coffee. However, American-style coffee bars appear to reversing this trend, although the situation varies from country to country. Consumption of soft drinks in the United States has shown rapid growth since the mid-1960s: the percentage of the population drinking soft drinks grew from 47 percent in 1975 to 58 percent in 2011. It does; however, appear to have reached a plateau as very little growth has been achieved over the last four years. However, In Germany coffee remains the most popular beverage and although the consumption of herbal teas, fruit juices and mineral water is rising, it does not appear to be doing so at the expense of coffee. In Japan coffee is gaining ground at the expense of other beverages, but more slowly than in the early 1980s (International Trade Center (ITC), 2011).

According to International trade Center (ITC) (2011), in countries that have a history of drinking coffee, there seems to be a direct correlation between the level of income and the level of consumption. The highest consumption per capita is found in the Nordic countries: Denmark, Finland, Iceland, Norway and Sweden – all of them at around 10 kg per person per year. Other European countries such as Germany, Switzerland, the Netherlands and Austria also have a history of drinking coffee and also enjoy relatively high personal incomes. It is noticeable that countries with a tradition of drinking coffee and lower personal incomes, such as Spain, Portugal and Greece, have a considerably lower rate of consumption. Given the fact that coffee is still considered to be a luxury item in many consuming countries, it is not surprising that as a general rule, changes in real incomes have a greater effect on consumption in low income countries than in high-income countries.

A global study report on revitalizing Indian Tea export in Russia by the Department of Marketing, SAL Institute of Management (2012), recommended the following marketing strategy for further developing the tea market in Russia. Firstly since, Russian tea market is a relationship oriented market, Tea Board, and Moscow have been encouraging the Indian Tea Companies to open representative offices in Moscow to liaison with the Russian tea companies on a regular basis. Secondly, as Russia has graduated from a "command and

control" economy to a "market economy" and as the average Russian consumer becomes more affluent and astute and is demanding good quality tea in attractive packets, Tea Board has to encourage Indian tea companies to also graduate from being bulk tea exporter to branded tea exporter. Thirdly, as there is a 5 percent import duty on bulk tea imports to Russia but a 20 percent import duty on packed tea imports to Russia, the Indian tea companies are being aggravated to set up tea packaging and bagging factories in Russia. Additionally, the researcher noted that, most of the countries in this region are becoming progressively brand conscious since it was noted high perception of consumers in many of supermarkets and departmental stores about tea brands rather than countries of origin. However, in some countries like Syria, Saudi Arabia, Turkey, etc. origin still matters.

Fair trade on coffee helps to the UK population as a tool for improving brand perception through trust in the Fairtrade mark and integrity of the Fairtrade system and also offers ethical assurance, which is of increasing importance (Fairtrade Organization, 2012).

A study conducted by Minten *et.al.*(2014), in order to understand the international market segmentation of coffee exported from Ethiopia found that better grades are associated with higher prices; there are significant differences in prices for coffee from different regions; and certification raises the price of coffee. They also found that organic certificates of coffee are rewarded the highest prices in the Middle Eastern and North American markets, while Fair Trade coffee gets the best prices in Europe.

Sahni (2014) conducted a study on Trends in India's Exports: a comparative study of pre and post reform period and found that exports of coffee from India has shown some improvement during post-reform period, he argued that the rise in exports of coffee may be attributed to the factors such as failure of Brazilian coffee crop, increase in India's competitiveness in coffee.

A market survey conducted by FAO regional office for Asia and the Pacific [nd], to produce Arabica coffee manual for Myanmar recommended that, consistency in the quality of coffee export and quality certification is as vital as quality to most international buyers and assisting producers to process, market and export high quality coffee can build confidence and positive market awareness on the international buyer about the coffee industry.

2.5. WTO and Trade agreements in the Agriculture Sector

In developing countries, agricultural and rural development is central to reducing poverty. In its work with poor communities and small-scale producers in over thirty-five developing countries, Action Aid has witnessed the negative impacts of agricultural trade liberalization. It believes that food security, poverty reduction and sustainable development should at the heart of the negotiations to reform the Agreement on Agriculture (Actionaid,[n.d]).

A study conducted by Bhalla and Gurmail (2010) employed stat wise analysis to examine the performance of agriculture at the state level in India during the post-reform period (1990-93 to 2003-06) and the immediate pre-reform period (1980-83 to 1990-93) it was found that the post-reform period has been characterized by deceleration in the growth rate of crop yields as well as total agricultural output in most states. The study further argued that by ending discrimination against tradable agriculture, economic reforms were expected to improve the terms of trade in favour of agriculture and promote its growth. The slowdown in the process of cropping pattern change means that most government efforts to diversify agriculture have failed to take off.

A Study conducted by Key Sadoulet and De Janvry (2000) argued that many developing countries implemented sweeping agricultural reforms over the last decade. Reforms have included the removal of quotas and price controls, changes in international trade barriers, and the commercialization and privatization of state marketing boards for key crops. These reforms have often generated intense criticism from groups claiming that they hurt poor farmers and poor households. This concern has generated an extensive literature on the economics of agricultural trade reform in developing countries, much of which has focused on explaining the large variations in supply response across countries, regions and households.

A study by Jay Faviosa *et al.* (2005), on the Doha Round of the World Trade Organization and Agricultural Markets Liberalization: Impacts on Developing Economies investigated the impacts of multilateral removal of all border taxes and farm programs and their distortions on developing economies, using a world agriculture partial equilibrium model. They quantified changes in prices, trade flows, and production locations. Border measures and farm programs both affect world trade, but trade barriers have the largest impact. Following removal, trade expansion is substantial for most commodities, especially dairy, meats, and vegetable oils.

Net agricultural and food exporters emerge with expanded exports; net importing countries with limited distortions before liberalization are penalized by higher world prices and reduced imports.

On a study conducted by Lin and Michael (2010) evaluated the agricultural trade creation and diversion effects of the most important free trade agreements. Trade creation and diversion effects are estimated using a Poisson Pseudo-Maximum-Likelihood estimator with various fixed effects to deal with heteroscedasticity and zero trade observations. It was found the estimated impacts of free trade agreements are different if zero trade observations are considered. The ASEAN-China preferential trade agreement, EU-15, EU-25, and Southern African Development Community agreements have generated large increases in agricultural trade among their members.

A study by Actionaid (n.d) argued that, following the Uruguay Round negotiations, all agricultural products were brought under multilateral trade rules by the WTO's Agreement on Agriculture. The Agreement is made up of three 'pillars': market access, export competition and domestic support. However, the Agreement on Agriculture has demonstrated several weaknesses mainly of design related issues and implementation related issues. From design related issues perspective the Agreement fails to recognize the fundamental differences between agricultural systems in developed and developing countries and uses a one-size-fits-all approach. It ignores, for example, the fact that agriculture is the main source of livelihood for the majority of the population in developing countries and that the sector is a major contributor to national income. Whereas, from implementation related issues perspective the design related issues have resulted in the unfair implementation of the Agreement on Agriculture. Developed countries continue to subsidize their agriculture and food exports very heavily while simultaneously protecting their producers by manipulating tariffs and employing tariff peaks and tariff escalation.

2.6. Determinants of export marketing

There is generally no acceptable determinant of export performance in literature (Bilkey 1982; Cavusgil, 1984; Cooper and Klenischmidt, 1985; Medsen, 1989; and Diamontopoulous and Inglis, 1988). However, the present study focused on the determinants of export marketing performance of India and Ethiopian coffee export firms with respect to the legal, political, socio- cultural and economic factors.

A study conducted by Kaynak and Kuan (1993), found that, variables such as age of the export firm and experience; overall satisfaction with experience and technological strength of export firm were all positively related to export performance.

A number of empirical studies have shown the degree of marketing programme adaptation to be influenced by internal and external factors. The internal factors affecting the degree of marketing programme include managerial characteristics (De Luz 1993), the firm characteristic and competence (Zon and Stan 1998), product characteristics (Lages 2000). The external factors influencing product adaptation depend on the industry; foreign market characteristics; and domestic market characteristics (Lages, 2000).

Marketing strategy of a firm is one of the major elements of export performance and one of the key factors impacting export performance (Cavusgil and Zou, 1994; Thirkell and Dau, 1998; Lee and Griffith, 2004; Brodrechtova, 2008; Salavou, Halikias, 2008). Traditionally marketing strategy was identified as an antecedent and determinants of export performance (Cooper, Kleinschmidt, 1985; Baldauf *et al.*, 2000; Leonidou *et al.*, 2002; Lages, 2003; Mavrogiannis *et al.*,2008). Export marketing strategy had significant influence on export performance and it was distinguished as one of the most frequently used determinants (Abdul Adis and Sidin, 2010).

Studies by (Lages and Lages, 2003; Mavrogiannis *et al.*, 2008; Salavou and Halikias, 2008; Mohamad *et al.*, 2009), on the significance of the marketing strategy showed that there is a strong association between export marketing strategy and export performance. The results indicated that there is a positive and direct impact of marketing strategy on export performance. In contrast, researchers such as Julian, (2003); Julian and O'Cass, (2003), concluded that export marketing strategy had no effect on export performance. Also a study by Abdul Adis and Sidin, (2010), revealed that there was no direct or significant relationship between export marketing strategy (concluding product adaption, promotion adaption, distribution strategy, design strategy, price competiveness, support to foreign distributer, target market specification) and export performance of Malaysian wooden furniture industry.

The influence of marketing strategy on export performance has been the focus of a number of studies (Zon and Stan, 1998). A search through literature on determinants of the export performance of a firm shows that there are several factors that were identified and investigated in different literatures as determinants (Lages, 2000).

Leonidou *et al.*(2002) argued that appropriateness of distribution channel was not static and it is dependent on varies foreign market conditions like economic condition and distribution structure of foreign market.

A study by Mehmet (2007) on the relationship between marketing strategies and performance in an economic crisis found that companies that modify their strategies appropriately can maintain or improve their performance in times of crisis.

Differences in social conditions, religion and material culture all affect consumers' perceptions and patterns of buying behaviour and failure to understand the social cultural dimensions of a market are complex to manage (Doole and Lowe, 2008).

It is important for a marketer to understand the political environment of export market which includes any national or international political factor that can affect in their operations or decision making. Unstable political regimes expose foreign businesses to a variety of risks that they would generally not face in the home market (Doole and Lowe, 2008).

Export marketer has to have the understanding of economic developments in terms of the world trading infrastructure (such as world institutions and trade agreements developed to foster international trade, at a regional level in terms of regional trade integration and at a country/market level) and how they impose on the marketing strategy. Additionally, firms need to be aware of the economic policies of countries and the direction in which a particular market is developing economically in order to make an assessment as to whether they can profitably satisfy market demand and compete with firms already in the market (Doole and Lowe, 2008).

An export company is not just bound by the laws of its home country but also by those of its host country and by the growing body of international law. Legal systems in different countries can affect many aspects of a marketing strategy of a firm. For instance, in the USA, the MG sports car was withdrawn when the increasing difficulty of complying with safety legislation changes made exporting to that market unprofitable. Kraft Foods sell a product called Lifesavers, which are very similar to the Nestlé Polo brand, in many countries. Using EU law, Nestlé attempted to stop the sale of Lifesavers in the European Union (EU) purely to protect their market share. It is important, therefore, for the firm to know the legal environment in each of their markets (Doole and Lowe, 2008).

Understanding the cultural background of individuals is very important in export marketing because this will determine their wants, values, and attitudes and beliefs. The export manager should always look out for new knowledge about how culture may be impacting customers' behaviours (Khrystyna, 2009).

Having the knowledge of legislation of a country as one of the macro environment is a basis through which the governments create statutes and guidelines that provide a framework for regulatory the behaviour of both consumers and business (Khrystyna, 2009).

The economic policies of most countries are influenced greatly by policies being implemented by their respected governments. By knowing these policies the marketers can gain valuable insights into how impending government actions may affect core markets (Khrystyna, 2009).

All the market systems depend on economic conditions because this will determine whether business will grow, remain the same or decline. Thus, using macroeconomic forecasting models helps managers gain a better understanding of potential future system trends within an industrial sector (Khrystyna, 2009).

It is necessary to be aware of the knowledge implications emerging from the introduction of new technology, which may have an impact on the future performances of the core marketing system. The manager should give priority to tracking developments on new ways of improving product performance or reducing process costs (Khrystyna, 2009).

All these studies provided valuable methodological ideas which helped in the shaping of the present study. The purpose of the present study review of literatures was to substantiate the necessity of the current work.

To conclude, this brief review of selected literature indicates that extensive research has been conducted to study the export marketing strategies of different types of commodities including coffee in different countries. The existing literatures also showed that although there is increasing trend in exports from developing countries however there are different factors come in to play in determining the export marketing of a country. Therefore, given the increasingly competitive nature of coffee export marketing, it has become more important for Indian and Ethiopian coffee export firms to identify the factors determining the export marketing of coffee that would contribute to greater export marketing performance. Thus, the

present study was a pioneer research for the two countries particularly in the coffee industry to provide insights in the determinants of coffee export marketing in the two countries and coffee export marketing strategies of coffee in India and Ethiopia a comparative analysis. Many studies have been conducted to identify determinants of export marketing. However, no previous study has tried to identify the determinants of export marketing of coffee in India and Ethiopia. Similarly no previous study was found which identified the existing and future export marketing strategies of coffee in India and Ethiopia using primary data.

METHODOLOGY

CHAPTER THREE

3. METHODOLOGY OF THE STUDY

This chapter explicates the research methodology that was used to undertake the present study. Firstly, essential background about study area was presented. The subsequent sections described the nature of data used, sampling design, mode of data collection and method of data analysis,

3.1. Description of the study area

3.1.1. Study areas in India

India is located in Southern Asia bordering the Arabian Sea and the Bay of Bengal having 28 states and seven union territories. Neighbouring countries include Bangladesh, Bhutan, Burma, China, Nepal, and Pakistan. India has a diverse geology; upland plain (Deccan Plateau) in south, flat to rolling plain along the Ganges river, deserts in west, and Himalayas in north. The geographic area of the country is around 3.29 million sq. km. (1.27 million sq. Mi) and its total Population (2012 est.) size is 1.21 billion.

The Indian economy is the world's tenth largest by nominal GDP and third largest by purchasing power parity. Following market based economic reforms in 1991, India became one of the fastest-growing major economies; it is considered a newly industrialised country. The economy of the country is comprised of Agriculture 18.1 percent of GDP, Industry 26.3 percent of GDP and Services and transportation accounted 55.6 percent of the GDP of the country (ETD. 2015).

Coffee Board of India [n.d] has noted that the history of Indian coffee began with planting of 'Seven seeds' of 'Mocha' during 1600 AD by the legendary holy saint Baba Budan, in the courtyard of his hermitage on 'Baba Budan Giris' in Karnataka. Commercial plantations of coffee were started during 18th century after the British entrepreneurs conquered the hostile forest terrain in south India. Followed by this event, the Indian coffee industry has made swift pace and earned a distinct identity in the coffee map of the world. Coffee in India is traditionally grown under a canopy of thick natural shade in ecologically sensitive regions of the Western and Eastern Ghats spread over Karnataka, Kerala and Tamil Nadu. Coffee cultivation is also being expanding rapidly in the non-traditional areas of Andhra Pradesh, Odisha as well as in the North Eastern states.

3.1.1.1. Major coffee plantation regions in India

South Indian states are the major producer of Coffees in India, Karnataka (53 percent), Kerala (28 percent), Tamil Nadu (11 percent) and the remaining (8 percent) from the other states includes Andhra Pradesh, Orissa, Assam and Tripura (Walk Through India [nd]). According to National Multi Commodity Exchange of India limited ([nd]), Karnataka alone accounts for over 56.1 percent of total area under coffee cultivation (59 percent of planted coffee Arabica, 41 percent of coffee Robusta) and over 70.4 percent of total coffee production in India; making it the most significant coffee producing state of the country. Robusta is dominant in Kerala likewise Arabica in Tamil Nadu. Traditional coffee growing regions in India constitute of the Southern States of Karnataka (229,658 ha), Kerala (84,948 ha) and Tamil Nadu (31,344 ha). Together they represent over 84.5 percent of total area under coffee cultivation and produce 97.9 percent of total coffee in India. In India production of Coffee Robusta is more i.e. around 62-65 percent, whereas production of Arabica is considered around 35-38 percent. The notable coffee beans in the country are Mysore coffee and Monsooned Malabar coffee. Generally, coffee is a major export driven commodity in the country with nearly 70 percent of the total production is being exported.

Traditional coffee growing regions in India originated from the southern states of Karnataka, Kerala and Tamilnadu state together they represent over 84.5 percent of total area under coffee cultivation in India. Hilly area and good monsoon in this region makes it best place for important varieties of coffee (Walk Through India [nd]). Hills of Western Ghats receive plenty of rainfall during the monsoon season which makes the southern region the best place for coffee cultivation. Indian coffee is considered as one of the finest coffee in the world, they grow under the shade rather than direct sunlight.

According to Walk Through India (n.d), the major coffee plantation (growing) regions in India include:

a) Chikmangalur

Chikmagalur is the first place in India where coffee was introduced; it is also known as coffee land of Karnataka. Chikmagalur is one of the famous hill stations in Karnataka state, located in the foothills of Mullayanagiri range. Its geography and climate have made it one of the largest coffee estates in Karnataka followed by Kodagu, Coorg and Hassan. Mullayanagiri is the highest peak of Karnataka, situated in the Baba Budan Giri Range of the Western Ghats

and tallest peak between the Himalayas and the Nilgiris, and it is known as the best place for trekking in Karnataka.

b) Wayanad

Robusta is the dominant coffee variety in Kerala and the state constitutes traditional coffee growing areas of 84,948 ha. The green paradise of Malabar region: Wyanad is located between the mountains of the majestic Western Ghats. Wayanad is one of the best hill stations of Kerala followed by Munnar, Nalliyampathy and Rajamala. The beautiful hill region is surrounded by ever green forest, Pookkode Lake and Karapuzha dam nearby. Its pleasant climate is best for coffee cultivation also known as Coffee County of Kerala. Major varieties of coffee cultivated in this region are Rubusta and Arabica. Malabar region is known for its beautiful hill, green valleys and cool climate which have made it one of the best places for flora and fauna.

c) Yercaud

Arabica is the dominant coffee variety in Tamil Nadu and the state constitutes traditional coffee growing areas of 31,344 ha. The small and young hill station of Tamil Nadu is located in Salem District. Yercaud is situated in the Shevaroys range of hills in the Eastern Ghats and got its name with a meaning Lake Forest due to its landmark ; characterised by a forest near to lake. Cool climate and silent valley of Yercaud known as the best coffee forests in India. Nilgiris district, Coonoor and Kodaikanal are other places in Tamil Nadu which are known for coffee plantation in India.

d) Araku

Araku is a hill station in Visakhapatnam district of Andhra Pradesh, in the Eastern Ghats of India inhabited by different types of tribes. Coffee plantation in Araku is known for its first tribal growers' organic coffee brand. Coffee cultivation industry is secondary, while pepper and rubber are cultivated by the tribal all around the state. The amazing Araku valley is surrounded by Galikonda, Raktakonda, Sunkarimetta and Chitamogondi mountains and Anantagiri and Sunkarimetta Reserved Forest. Other coffee producing regions of Andhra Pradesh are Chintapalli, Paderu and Maredumilli in the Eastern Ghats of India. The area from Visakhapatnam to East Godavari districts is also known for coffee plantations in the state.

e) Daringbadi

Daringbadi is known as Kashmir of Orissa, located in the hill region of Orissa and the only hill station of the state. Daringbadi is one of the youngest coffee plantation region in India followed by Chintapalli, Himachal Pradesh and Assam. This beautiful region is gifted with dense pine jungles, long coffee gardens, Majestic Mountain and amazing valleys. Daringbadi offers cool climate, landscape beauty, deep dense forest, tribal people and pleasant environment, still unexplored and untouched. Koraput district in Orissa is another place known for most traded commodities, the rich coffee plantation (Walk through India [n.d]).

Furthermore, the researcher noted that, about 82 percent of the total Indian coffee exporters are based in Karanataka State, Kerala State and Tamilnadu State. Accordingly, primary data was collected from Indian coffee exporters particularly in the aforementioned three states in representing Indian coffee exporters.

Figure 3.1: Location of coffee growing regions in India

Source: World Coffee Research

3.1.2. Study area in Ethiopia

Ethiopia, officially known as the Federal Democratic Republic of Ethiopia, is a country located in the Horn of Africa and bordered by Eritrea to the north and northeast, Djibouti and Somalia to the east, Sudan and South Sudan to the west, and Kenya to the south. The country has around 90 million inhabitants (2015 estimation), Ethiopia is the most populous landlocked country in the world, as well as the second-most populated nation on the African continent. It occupies a total area of 1,100,000 square kilometres (420,000 sq mi), and its capital and largest city is Addis Ababa. Ethiopia is a multilingual society with around 80 ethnic groups, with the two largest being the Oromo and the Amhara. Presently, Ethiopia is administratively structured into nine regional states Viz.,Tigray, Affar, Amhara, Oromiya, Somali, Benishangul-Gumuz, Southern Nations Nationalities and Peoples (SNNP), Gambela, and Harari and two city administrations, that is, Addis Ababa and Dire Dawa Administration Councils (Central Statistics Agency, 2011).

Most importantly, Ethiopia is the birth place (origin) of coffee Arabica. Harris (1844) noted that, coffee trade from Ethiopia started five hundred years earlier when it was transported from Ethiopia to Arabia by a trader. As the production of coffee in other countries slowly started to increase, Ethiopian producers started to feel the competition. African countries like Angola, Kenya and Madagascar also started to grow coffee by the early 1960s. According to the National Coffee Association USA, EST (1911), Ethiopia is the birth place of Arabica coffee. In the Ethiopian highlands, where the legend of Kaldi, the goatherd, originated, coffee trees grow today as they have for centuries. It is said that he discovered coffee after noticing that his goats, upon eating berries from a certain tree, became so spirited that they did not want to sleep at night. Kaldi dutifully reported his findings to the abbot of the local monastery who made a drink with the berries and discovered that it kept him alert for the long hours of evening prayer. Soon the abbot had shared his discovery with the other monks at the monastery, and ever so slowly knowledge of the energizing effects of the berries began to spread. As word moved east and coffee reached the Arabian Peninsula, it began a journey which would spread its reputation across the globe. Today coffee is grown in a multitude of countries around the world. Whether it is Asia or Africa, Central or South America, the islands of the Caribbean or Pacific, all can trace their heritage to the trees in the ancient coffee forests on the Ethiopian plateau.

Ethiopia is one of the few countries where coffee trade is not liberalized. All coffee traders must purchase coffee through the ECX market with the only exceptions for co-operatives and large scale growers who are exempted to trade coffee internationally without the ECX Market by merely obtaining quality certification from the ECX laboratories. Coffee marketing occurs at three different marketing levels. The first is a primary level coffee transaction where coffee farmers and suppliers trade coffee at a local level. These markets are located near coffee farms. The second transaction chain operates at the ECX Addis Ababa floor where transactions are done in an open outcry system. The third level is the usual international coffee market where exporters sell coffee to importers. The coffee export business is reserved for citizens of Ethiopia. Out of the total number of coffee exporting companies, ninety three percent are private companies, five percent are coffee growing farmers' cooperative unions, and two percent are government enterprises (GAINS.2014.

3.1.2.1. Major coffee growing regions in Ethiopia

According to the Global Agricultural Information Network (2013), Coffee is grown in the two regions of the country namely Oromia and Southern Nations, Nationalities and People Regions (SNNPR). From which there are seven major coffee growing regions in the country: Harar, Sidamo, Yirgacheffe, Limmu, Jimma, Lekemt, Bebeka. In Ethiopia coffee harvesting time is during August to January of the year and the notable coffee beans in the country are Harrar, Sidamo, and Yirgacheffe named on the basis of the districts where the coffee is grown.

Coffee is being grown in different part of the country and generally, the coffee growing regions of Ethiopia are found in Western, Southern and Eastern part of the country (Morten Wennersgaard, 2012).

a. Western coffee growing region of Ethiopia

The west part of Ethiopia represents nearly 46 percent of Ethiopia's total production. It includes regions like Jimma, Kaffa, Illubabor, Wellega, Bench Maji and others. Except for certain areas the west is typically known for producing sundried coffees of average to lower qualities.

b. Southern coffee growing region of Ethiopia

The well-known areas in the southern part of Ethiopia are Sidamo and Yirgacheffe; known for their clean, floral and acidity driven washed coffees and "high quality" sundried with genuine and unique fruit and berry flavours. The south represents 45 percent of the total Ethiopian coffee production. Most of the Cooperatives in these areas are Organic and/or Fair-Trade Certified as well as UTZ[2] and Rainforest Alliance is picking up. Yirgacheffee has become the brand name of coffees in the Gedeo Zone bordering Sidamo. Sidamo Zone is also known for their dense production of coffee particularly in the areas like Aleto Wondo, Darra and Dale. Both washed and sundried is common, but in Yirgacheffe the majority of the coffee is washed.

c. Eastern coffee growing region of Ethiopia

The East part of Ethiopia, Harar accounts for 10 percent of Ethiopia's coffee production and is all sundried. According to history the coffee grew wild here long time before it was cultivated. Coffee from Harar is widely known for their typical blueberry notes and intense fruit flavours. Smallholders typically grow the coffee, and most of it is traded by local collectors and sold through the ECX. They are famous for the so called varietal Harar long berry.

In Ethiopia coffee is naturally grown in a shade under the large indigenous trees such as the Cordia Abyssinica and the Acacia species. There are four areas where coffee production systems take place in Ethiopia viz., forest coffee, semi-forest coffee, garden coffee, and plantation coffee. Forest coffee is a wild coffee grown under the shade of natural forest trees, and it doesn't have a defined owner. Semi-forest coffee farming is a system where farmers have to carry out thinning and select forest trees to let sufficient sunlight to the coffee trees and to provide adequate shade. A farmer who prunes and weeds the forest area once a year claims to be the owner of the semi-forest coffee. Garden coffee is normally found in the vicinity of a farmer's residence. It is normally fertilized with organic material and usually inter-cropped with other crops. Plantation coffee is planted by the government or private investors specifically for export purposes. Fertilizers and herbicides are usually used in the coffee plantation farming system. Ninety five percent of Ethiopia's coffee is produced by

[2] *UTZ Certified stands for sustainable farming and better opportunities for farmers, their families and our planet. The UTZ program enables farmers to learn better farming methods, improve working conditions and take better care of their children and the environment*

small holder farmers (owning less than two hectares) while the remaining five percent is grown on modern commercial farms.

The researcher also noted that out of the total coffee exporters in Ethiopia 95 percent of them are located in Addis Ababa; where the present study is carried out and the remaining 5 percent are located in Diredawa (Harer Region).

Figure 3.2: Location of coffee growing regions in Ethiopia

Source: Bootscoffee

3.2. Sampling frame and sample size

According to Coffee Board of India and Ethiopian Exporters Associations up to the year 2009 the total number of coffee exporters both from India and Ethiopia were 135, of which, 65 were Indian coffee exporters and 70 were Ethiopian coffee exporters. Out of the total coffee exporters from India and Ethiopia, 20 percent were taken as total sample size using simple random sampling technique. This is mainly because the selected sample size can represent the total population; since all exporters of the country operate under a uniform national level export rules, procedures and marketing strategies.

3.3. Sources of Data

Both primary and secondary sources of data were employed for the present study in order to meet the objectives of the study. Accordingly, the details of the data collection instruments and how they were operated for conducting the present study are discussed below.

3.3.1. Data collection methods

3.3.1.1. Primary source of data

i. Questionnaire

Questionnaire was used for primary data collection from Indian and Ethiopian coffee exporters. Accordingly, the questionnaire constitutes of questions regarding the major determinants of Indian and Ethiopian coffee export firms' success, existing and future marketing strategies and export marketing programmes of Indian and Ethiopian coffee export firms. For assessing the determinants for the success of Indian and Ethiopian coffee export firms; the legal, political, socio-cultural, geographic and economic factors were incorporated in the questionnaire. Similarly, to examine the export marketing strategies of coffee in India and Ethiopia; the export market targeting, segmentation, positioning strategies, and export market mix practices (export market pricing strategy, promotional strategy, distribution strategy and product strategy) were included in the questionnaire.

To confirm the quality of the data collection instrument; the questionnaire was distributed for a total of seven Indian coffee exporters for pilot study; of which four of them were collected. It was found that only two questions were irrelevant and got removed from the questionnaire before distributing it to the respondents. A total of 54 questionnaires were distributed to Indian (26 respondents) and Ethiopian (28 respondents) coffee export firms. Of which, 36 of them were collected and 28 of them were retained for final analysis, 14 of them were from India and 14 of them were from Ethiopia.

ii. Interview

In order to triangulate the results collected from Indian and Ethiopian coffee exporters, unstructured open ended interview was made with the Secretary of Coffee Board of India and unstructured open ended telephone interview was made with Ethiopian Commodity Exchange Chief Strategy Officer regarding the major structural changes in the export marketing of

coffee in India and Ethiopia from 1980-2012 and their current national level coffee export marketing strategies.

3.3.1.2. Secondary source of data

Secondary data were collected from International Coffee Organization (ICO), Coffee Board of India, Observatory of Economics complexity, and World Bank. The secondary data collected was related to quantity of coffee production, quantity of coffee export, monetary value of export, price paid to coffee growers, quantity of domestic consumption and export by destination of coffee from India and Ethiopia. For assessing the trend and composition of coffee export in India and Ethiopia; thirty years' time series (1980-2010) data of coffee was collected from the aforementioned source. However, in some cases due to the inconsistency of data and unavailability of data for the entire study period, some of the above variables were analysed with the existing time series data.

3.3.2. Methods of data analysis

Both qualitative methods and quantitative methods have been used to develop understanding about the marketing strategies of Indian and Ethiopian coffee exporters. Time series data from 1980-2010 were used to analysis the trends and compositions of coffee in the two countries. However, due to unavailability of time series data from the year 2006-2009 the present study was limited to analyse country wise destinations of Indian and Ethiopian coffee exports only from the year 1980-2005. Similarly the monetary value of coffee export from the two countries were analysed only from 1995-2010. Accordingly, analytical tools employed in the present study are described below.

3.3.2.1. Methods used to identify major determinants of coffee exports in India and Ethiopia

a) Exponential Compound Annual Growth Rate (CAGR)

For analysing the trend and composition of coffee export from India and Ethiopia the growth in the volume of coffee production, volume of domestic consumption, volume and monetary value of exports and prices paid to coffee growers the exponential compound annual growth rate function was fitted, which has wide application in previous studies (Veena, 1996; Elias and Patil, 2013; Saraswati et al., 2013 and Kusuma and Basavaraja, 2014) and takes the form:

$$Y_t = a\beta^t e^{ut} \quad \text{(Eq. 1)}$$

Where,

Y_t = Dependent variable in period t (Quantity of production, quantity of domestic consumption, quantity and monetary value of exports and price paid to coffee growers)

a = Intercept

β = Regression or trend coefficient = (1+g)

t = years which take the values, 1, 2, 3..., n (1980-2010)

u_t = Disturbance term for the year t

e = the natural Logarithm (=2.71828)

The equation was transformed into log linear form $LnY_i=\beta o+\beta_i t_i+u_i$ to allow for the Ordinary Least Squares (OLS) estimation. The compound growth rate (g) in percentage was then computed using the relationship $g = (10^{b-1})*100$ (Veena, 1996). Further, descriptive statistics like means, coefficient of variation and percentage share of the given variables were also computed to substantiate the statistical value of the study.

b) Instability Analysis

Instability analysis was computed on coffee export from India and Ethiopia. In order to study the variability in the time series data, coefficient of variation (CV) was used as an index of instability. Wherever the trend of coefficients of the series were found significant, the variation around the trend rather than the variation around the mean (CV) was used to measure the instability as an index of instability (Bhaskar *et al*,. 2013).

c) Generalised Auto Regressive Conditional Heteroscedasticity Model

Auto Regressive Conditional Heteroscedasticity (ARCH) and Generalised Auto Regressive Conditional Heteroscedasticity (GARCH) model were employed to examine the extent of shock of variation (volatility) in production volume, volume of domestic consumption volume, export volume, export value and the price paid to coffee growers in India and Ethiopia for the study period (1980-2010). Country wise yearly secondary data was employed to run the model. The data have been analyzed using Economic views (Eviews) statistical computer package. Engle, R.F. (1982) and David Harper, CFA, FRM, CIPM, AIM.(2010) noted that GARCH (p, q) is a general autoregressive conditional heteroscedastic model. Its key aspects include:

Autoregressive (AR): tomorrow's variance (or volatility) is a regressed function of today's variance, it regresses on itself.

Conditional (C): tomorrow's variance depends on condition of the most recent variance. An unconditional variance would not depend on today's variance.

Heteroscedastic (H): variances are not constant, they flux over time.

GARCH regresses on "lagged" or historical terms. The lagged terms are either variance or squared returns. The generic GARCH (p, q) model regresses on (p) squared returns and (q) variances. Therefore, GARCH (1, 1) "lags" or regresses on last period's squared return (i.e., just 1 return) and last period's variance (i.e., just 1 variance).

GARCH (1, 1) given by the following equation.

$$\sigma^2_t = a + br^2_{t-1,t} + c\sigma^2_{t-1} \qquad \textit{(Eq. 2)}$$

The same GARCH (1, 1) formula given by Hull (1988) for the same GARCH equation as:

$$\sigma^2_n = \gamma V_L + \alpha u^2_{n-1} + \beta\sigma^2_{n-1} \qquad \textit{(Eq. 3)}$$

The first term (γVL) is important because VL is the long run average variance. Therefore, (γVL) is a product: it is the weighted long-run average variance. The GARCH (1, 1) model solves for the conditional variance as a function of three variables (previous variance, previous return squared and long-run variance):

$$h_t = \alpha_0 + \alpha_1 + r^2_{t-1} + \beta h_{t-1} \qquad (\textit{Eq. 4})$$

Where,

h_t or σ^2_t= Conditional Variance (i.e., we are solving for it)
a or α = weighted long-run (average) variance
h_{t-1} or σ^2_{t-1} = previous variance
r^2_{t-1} or $r^2_{t-2,t}$= previous squared item

Based on the above formula, persistence = (b + c) or (alpha-1+ beta), it is a feature embedded in the GARCH model refers to how quickly (or slowly) the variance reverts or "decays" toward its long-run average. High persistence equates to slow decay and slow "regression toward the mean;" low persistence equates to rapid decay and quick "reversion to the mean. A persistence of 1.0 implies no mean reversion. A persistence of less than 1.0 implies "reversion to the mean," where a lower persistence implies greater reversion to the mean.

The sum of the weights assigned to the lagged variance and lagged squared return is persistence (b+c = persistence). A high persistence is where the sum of the weights assigned to the lagged variance and lagged squared return persistence = (b + c) or (alpha-1+ beta), greater than zero but less than one implies slow reversion to the mean. But if the weights assigned to the lagged variance and lagged squared returns are greater than one (if b+c > 1), the model is non-stationary and, according to Hull, unstable.

d) Dickey-Fuller (DF) and Augmented Dickey-Fuller (ADF) Unit Root Test (URT)

The Dickey-Fuller (DF) and Augmented Dickey-Fuller (ADF) Unit Root Test was carried out to test the stationarity of the time series data before running the GARCH and ARCH model (see Dickey, D. A., and W. A. Fuller. 1979).

The DF and ADF Unit Root Test were computed based on the following regression forms:

Let the DF or ADF test for time series data $=Y_t$,

Regression without Constant and Trend $= \Delta Y_t = \delta Y_{t-1} + U_t$ *(Eq. 5)*

Regression with Constant $= \Delta Y_t = \alpha + \delta Y_{t-1} + U_t$ *(Eq. 6)*

Regression with Constant and Trend $= \Delta Y_t = \alpha + \beta T + \delta Y_{t-1} + U_t$ *(Eq. 7)*

Regression with Augmented Dickey Fuller (ADF) Test =

$$\Delta Y_t = \alpha + \beta T + \delta Y_{t-1} + \gamma_i \sum \Delta Y_{t-i} - e_t \qquad \textit{(Eq. 8)}$$

Where, the "lag difference" from "0" to "1" were considered to regress the Unit Root Test using ADF test

The hypothesis is: H0: $\delta=0$ (Unit Root)

$0H1: \delta \neq 0$

Decision rule:

If ADF test statistic (t*) > ADF critical value, implies accept the null hypothesis, i.e., unit root exists.

If ADF test statistic (t*) < ADF critical value, implies reject the null hypothesis, i.e., unit root does not exist.

e) Johanson test of Cointegration

The long-run relationships the price paid to Coffee Arabica growers and coffee Robusta growers in India from 1985 to 2010 was estimated using the Johansen co integration model.

Accordingly, label data (original data's) of the two variables were taken in to consideration to run the model and the results were generated with specification in allowing the model for linear deterministic trend in data.

There are a number of models that can be used to estimate long-run relationship such as Engle-Granger and Johansen Maximum Likelihood Procedure just to mention few. The Johansen Maximum Likelihood approach has a number of advantages over the Engle-Granger two stages approach to cointegration. As this is a vector autoregressive model (VAR) based technique, less concern is needed over whether the explanatory variables are exogenous or endogenous. Restrictions can be applied to the co-integrating vectors, which is not possible with the Engle-Granger approach. It can also be used for Granger Causality testing, where the lags in the error correction model can be jointly tested for significance, thereby determining any short-run causality from the explanatory variables to the dependent variable. Thus, Johansen Maximum Likelihood approach was used to estimate long-run relationship.

The Johansen cointegration analysis procedure relies on the relationship between the rank of a matrix and its characteristic roots. Enders (2004) notes that Johansen procedure could be viewed as a multivariate generalisation of the Dickey-Fuller test. Johansen suggests to start with a traditional VAR, to select appropriate number of lags based on the likelihood ratio test or alternatively AIC statistics, to estimate the vector error correction model and determine the rank of the matrix of parameters.

The co-integration of the system is tested using the maximum likelihood *Lmax*(*r*) which is a function of the cointegration rank *r*. Johansen describes two test methods: a) Trace Test and b) Maximum Eigenvalue Test. These statistics are then used to determine the number of cointegrating vectors. The test is based around an examination of the π matrix, where π can be interpreted as a long-run coefficient matrix. The test for cointegration between the variables is calculated by looking at the rank of the π matrix via its eigenvalues. π can be defined as the product of two matrices:

$$\pi = \alpha\beta'$$

The matrix β gives the co-integrating vectors, while α gives the amount of each co-integrating vector entering each equation of the vector error-correction model (VECM), also known as the adjustment parameter. The main difference between the two test statistics is that the Trace test is a joint test where the null hypothesis is that the number of co-integrating vectors is less than or equal to *r*, against a general alternative that there are more than *r*. Whereas the maximum eigenvalue test conducts separate tests on the individual eigenvalues, where the null hypothesis is that the number of co-integrating vectors is *r*, against an alternative of (*r*+1). The two statistics are:

$$\lambda_{Trace}(r) = -T\sum_{i=r+1}^{g} in\,(1-\hat{\lambda}_i) \qquad \textbf{Eq. 9}$$

$$\lambda_{Max}(r, r+1) = -T\,\ln(1-\hat{\lambda}_{r+1})$$

Where $\hat{\lambda}_i$ is the estimated value for the *i*th ordered eigenvalue from the π matrix. The Trace and maximum eigenvalue statistics are compared to the appropriate critical values.

If the study concludes co-integration, the study estimates the vector error-correction model VECM. As suggested by Enders (1995), having established that the variables are non-stationary a maximum likelihood approach based on a finite VAR model can specified to determine whether the system of equations are co-integrated.

$$X_t = A_0 + A_1X_{t-1} + \cdots A_pX_{t-p} + v_t,\ t = 1,2,\ \cdots T \qquad \textbf{Eq.10}$$

where p = lag length; X_t = a (n×1) vector of endogenous variables; A's are matrices of unknown parameters; and υ_t is an independently and identically distributed n dimensional

vector with zero mean and variance matrix εt. According to Mohammad and Verbeke (2010) the next step is specifying a VAR model in an error correction form. Following Johansen (1991) and Johansen and Juselius (1990) a general system of regression equations is stipulated as:

$$\Delta Xt = \tau 0 + \tau 1 \Delta Xt\text{-}1 + \ldots + \tau p\text{-}1\ \Delta Xt\text{-}(p\text{-}1) + \Pi\, Xt\text{-}p + \upsilon t \qquad \textbf{Eq.11}$$

Or

$$\tau j = \tau 0 + \sum_{j=1}^{p-1} \tau j \Delta Xt - 1 + \Pi\, Xt - p + \upsilon t \qquad \textbf{Eq. 12}$$

Where $\tau 0 = A0$;

$$\Upsilon j = -(I \sum_{j=1}^{p-1} Aj);\ j = 1, 2 \ldots, \quad p-1 \qquad \textbf{Eq. 13}$$

$$\Pi = -(I \sum_{i=1}^{p-1} Aj) \qquad \textbf{Eq. 14}$$

and Δ Xt is an (n×1) vector of Xt-j in first differences, and Π and τj (j = 1, 2, ..., k) are n by n matrices of parameters and υt is an n-vector of residuals which are assumed to be normally distributed with mean zero and have a contemporaneous covariance matrix εt. The long-run information in Xt is summarized by the long-run impact matrix Π. Π is the rank of the matrix of the VECM that determines the number of independent co-integrating vectors. If the matrix Π has a rank, r, greater than 0, then co-integration exists. If the rank of Π is 0, then the variables are segmented and the model translates into a standard VAR model in differences.

f) Market share and market growth model

To examine the market growth and market share of Indian and Ethiopian coffee exports to different countries exponential compound annual growth rate model and percentage rate were fitted. The coffee export market share of the Indian and Ethiopia coffee at different countries were also calculated using percentage share method against the total volume of coffee export from the two countries to the different export destinations. The export market shares of India

and Ethiopia at major export target market destinations (countries) were calculated using percentage method and presented using pie charts, bar graphs and tables.

To identify the major coffee export destinations (target market) for India and Ethiopia country wise percentage share of coffee export from India and Ethiopia were calculated. The results generated were further used for running transitional probability matrix. The percentage share of major coffee export destinations (target markets) were calculated using the compound growth rate model.

g) Herfindahl–Hirschman Index (HHI)

After calculating the market share and market growth of coffee export from India and Ethiopia one of the commonly accepted measures of market concentration, Herfindahl–Hirschman Index (HHI) was fitted.

HHI is calculated by squaring the market share of each firm competing in a market, and then summing the resulting numbers, where the market shares are expressed as fractions. The result is proportional to the average market share, weighted by market share. HHI can range from 0 to 1.0, moving from a huge number of very small firms to a single monopolistic one (importer country). Increases in the HHI generally indicate a decrease in competition and an increase of market power, whereas decreases indicate the opposite. Alternatively, if whole percentages are used, the index ranges from 0 to 10,000 "points". For example, an index of .25 is the same as 2,500 points. The major benefit of the HHI in relationship to such measures as the concentration ratio is that it gives more weight to larger firms.

Herfindahl–Hirschman Index (HHI) is expressed as:

$$\mathbf{HHI} = \sum_{i=1}^{N} \mathbf{S}_i^2 \qquad (Eq.15)$$

Where;

HHI is Herfindahl–Hirschman Index

s_i is the market share of firm (country) i in the market and,

N is the number of firms (countries) in the market.

The HHI ranges from 1/N to one, where N is the number of firms in the market. Equivalently, if percents are used as whole numbers, as in 65 instead of 0.65, the index can range up to 100^2, or 10,000.

A HHI below 0.01 (or 100) indicates a highly competitive index.
A HHI below 0.15 (or 1,500) indicates an un-concentrated index.
A HHI between 0.15 to 0.25 (or 1,500 to 2,500) indicates moderate concentration.
A HHI above 0.25 (above 2,500) indicates high concentration.

A small HHI value indicates a competitive industry with no dominant players. If all firms have an equal share the reciprocal of the index shows the number of firms in the industry. When firms have unequal shares, the reciprocal of the index indicates the equivalent number of firms (importing countries in this case) in the industry. The closer a market is to being a monopoly, the higher the market's concentration (and the lower its competition). If, for example, there were only one firm in an industry, that firm would have 100percent market share, and the HHI would equal 10,000 (100^2), indicating a monopoly. Or, if there were thousands of firms competing, each would have nearly 0percent market share, and the HHI would be close to zero, indicating nearly perfect competition.

h) Markove Chain Model

Transitional probability matrix model of the Markove Chain analysis was computed to examine the coffee export target market of India and Ethiopia using Lingo computer Programming package. Year wise coffee export volume data for the period 1980 to 2005 were used to analyze the direction of trade and changing pattern of Indian and Ethiopian coffee exports. The major Indian coffee importing countries considered were Russian Federation (including the former USSR), Italy, Germany, USA, Japan and other importing countries with a share of 23.99percent, 14.39percent, 11.37percent, 8.30percent and 3.95percent respectively, from the total coffee exports from India (1980-2005). Similarly, the major Ethiopian Coffee importing countries considered were Germany, Japan, USA, Saudi Arabia, France and other Ethiopian coffee importing courtiers with a share of 29.73 percent, 18.25 percent, 14.67 percent, 9.96 percent, 6.51 percent and 20.85 percent, respectively from the total percentage of coffee export from Ethiopia (1980-2005).

Markov chain analysis was employed to analyse the structural change in any system whose progress through time can be measured in terms of single outcome variable (Dent, 1967). Recently, the model was also used by Kusuma and Basavaraja (2014) in order to estimate the

exports of mango from India. In the present study, the dynamic nature of trade patterns that is the gains and losses in export of Indian and Ethiopian coffee in major importing countries was examined using the Markov chain model. Markov chain analysis involves developing a transitional probability matrix 'P', whose elements, P_{ij} indicate the probability of exports switching from country 'i' to country 'j' over time. The diagonal element P_{ij} where i=j, measures the probability of a country retaining its market share or in other words, the loyalty of an importing country to a particular country's exports (in this case loyalty to India and Ethiopia). In the context of current application, structural change was treated as a random process with five major importing countries and the rest coffee importing countries categorised as others. The assumption was that, the average export of coffee from India and Ethiopia amongst importing countries in any period depends only on the export in the previous period and this dependence was same among all the periods. This was algebraically expressed as:

$$E_{jt} = \sum_{i=1}^{n} [E_{it} - 1] P_{ij} + e_{jt} \qquad \textit{(Eq.16)}$$

Where,

E_{jt} = exports from India or Ethiopia to the j^{th} country in the year t

$E_{i\,t}$-1 = exports of i^{th} country during the year t-1

$P_{i\,j}$ = the probability that exports will shift from i^{th} country to j^{th} country

e_{jt} = the error term which is statistically independent of Eit-1

n = the number of importing countries

The transitional probabilities P_{ij}, which can be arranged in a (c x n) matrix, have the following properties.

$$\sum_{i=1}^{n} P_{ij} = 1 \quad \textit{where}, 0 \leq P_{ij} \leq 1 \qquad \textit{(Eq.17)}$$

Thus, the expected export share of each country during the period 't' is obtained by multiplying the exports to these countries in the previous period (t-1) with the transitional probability matrix.

Consequently, transitional probability matrix (T) for the period 1980 to 2005 was estimated using linear programming (LP) framework by a method referred to as minimization of Mean Absolute Deviation (MAD).

Min, OP* + I e

Subject to:

$X P^* + V = Y$

$GP^* = 1$

$P^* > 0$

Where,

P^* is a vector of the probabilities P_{ij}

O is the vector of zeros

i is an appropriately dimensional vectors of areas

e is the vector of absolute errors

Y is the proportion of exports to each country.

X is a block diagonal matrix of lagged values of Y

V is the vector of errors

G is a grouping matrix to add the row elements of P arranged in P^* to unity.

3.3.2.2. Methods used to identify major determinants of coffee exports in India and Ethiopia

i) Kendall's Coefficient of Concordance

In order to assess and identify the major determinants of coffee export success in India and Ethiopia primary data were collected from coffee exporters of the two countries. Non parametric test mainly Kendall's W. Coefficient of Concordance model was fitted to measure the determinants of coffee export in India and Ethiopia.

Kendall's W, or coefficient of concordance, was actually developed as a measure of association, with the N blocks representing N independent judges, each one assigning ranks to the same set of K applicants (Kendall and Babington-Smith, 1939). Kendall's W measures the extent to which the N judges agree on their rankings of the K applicants. Kendall's W bears a close relationship to Friedman's test; Kendall's W is in fact a Scaled version of Friedman's test statistic:

$$W = T_F / N (K-1) \qquad \text{(Eq.18)}$$

The scaling ensures that W=1 if there is perfect agreement among the N judges in terms of how they rank the K applicants. On the other hand, if there is perfect disagreement among the N judges w = 0. The fact that the judges don't agree implies that they don't rank the K

applicants in the same order. So each applicant will fare well at the hands of some judges and poorly at the hands of others. Under perfect disagreement, each applicant will fare the same overall and will thereby produce an identical value for R_j. This common value of R_j will be R, and as a consequence, W=0.

Thus, the inferential statistical test-Kendall's W Test (coefficient of concordance) was fitted to determine if there is any significant difference in the various rankings of Legal and political, Socio-cultural, Geographic, Economic, and Competitive environmental factors in influencing the success of Indian and Ethiopian coffee export firms. The resulting statistic represents the level of agreement among the respondent in each sub-component of the given variables. Accordingly, the results generated from the model were presented based on the four basic variables of export marketing strategies viz., Export promotion strategies, export pricing strategies, export product strategies, and export distribution (place) strategies.

3.3.2.3. Methods employed to examine the existing export marketing strategies of India and Ethiopia

j) Descriptive frequency and percentage methods

In order to assess the existing export marketing strategies of coffee in India and Ethiopia primary data was collected from coffee exporters of the two countries. Descriptive statistics mainly frequency and percentage analysis were employed to figure out the type of export marketing strategies which are currently being implemented, those that are being planned to be implemented in the future and strategies which were implemented before but not presently applicable to the Indian and Ethiopian coffee export firms. Additionally, a comparison between Ethiopian and Indian coffee exporters against competing coffee exporter countries was made to assess the strength of Indian and Ethiopian coffee export marketing strategies. The comparison was made especially on the export market (product) positioning strategies, the competitive advantage of Indian and Ethiopian coffee Exporters. Furthermore, the marketing strategies currently being employed to build the brand of Indian and Ethiopian coffee in the international market (international customer mind) and also the strategic position of Indian and Ethiopian coffee export firms were examined using the same model.

RESULTS AND DISCUSSION

CHAPTER FOUR

4. RESULTS AND DISCUSSION

The increasing popularity of coffee as a drink and as a source of income for those who are involved across the coffee export market supply chain subjected many of developing countries to produce as well as export coffee to different export target markets. Due to the existence of differences in the internal and external marketing environmental actors (Viz., geography, politics, social, culture, religion and test and preference among consumers) made export marketing of coffee to become a tough task. In this regard, efforts were made to assess and understand the existing coffee export marketing strategies and design the future coffee export marketing strategies of India and Ethiopia in the present chapter.

Accordingly, the present chapter is presented the results of the study and discussion in the following order.

i. analysing the trend and composition of coffee exports of India and Ethiopia;

ii. identifying major determinants of coffee export in India and Ethiopia; and

iii. examining coffee export marketing strategies of India and Ethiopia and suggesting appropriate coffee export marketing strategies for both countries based on the result generated.

Both primary and secondary sources of data were used for the present study in order to meet the above objectives. Among the total coffee exporters from India and Ethiopia, 20 percent (up to the year 2009) were taken as the total sample size of the study and samples were drawn using simple random sampling technique. Primary data were collected using a questionnaire from exporters. Further interviews were made with the Secretary of Coffee Board of India and Ethiopian Commodity Exchange and the Chief strategy Officer. Besides, time series secondary data were collected from different authenticated sources like International Coffee Organization, World Bank, Coffee Board of India, and the Observatory of Economic Complexity from the year 1980-2010.

Analytical models such as Exponential Compound Annual Growth Rate, Coefficient of Variation, Auto Regressive Conditional Heteroscedasticity and Generalised Auto Regressive Conditional Heteroscedasticity, Johanson Cointegration model, Market share and market growth model, Herfindahl–Hirschman Index, Markov chain model of transitional probability

matrix, Kendall's W. Coefficient of concordance and simple descriptive statistics such as percentage were computed to analyses the data. Eviews, Lingo Programming-optimisation model, Statistical Package for Social Sciences (SPSS), and advanced Excel analysis computer packages were used to generate results.

SECTION I

4.1. Trends and compositions of coffee exports from India and Ethiopia

In addressing the objective of examining the trend and compositions[3] of coffee exports from India and Ethiopia; the trend in monetary value realized from coffee export, the trend in production of coffee Arabica and coffee Robusta, the trend in the volume of domestic consumption, the trend in export volume of green coffee and value added products of coffee, the trend of prices paid to coffee Arabica growers and coffee Robusta growers were examined using coefficient of variation, Exponential Compound Annual Growth Rate, Augumented Dicey Fuler Unit Root Test, Generalized Auto Regressive Conditional Hetroscedastcity (GARCH) and Auto Regressive Conditional Hetroscedastcity (ARCH) models. Additionally, the market integration between the prices paid to coffee Arabica growers and coffee Robusta growers was analyzed using the Johanson Cointegration Model. Furthermore, the market retention potential of major coffee export target markets of India and Ethiopia were analyzed by computing the Markov chain transitional probabilities matrix. To identify and segment the major export market destinations of Indian and Ethiopian coffee based on the trend in their share of export market power, the Herifindal Hirishman Index (HHI) analysis was fitted.

4.1.1. Trends in production of coffee in India and Ethiopia

Attempts were made to assess the trend in production of coffee in India and Ethiopia from 1980-2010. Trends in the production of coffee in India during the pre and post liberalization period were analyzed (see Table 4.1). Production of coffee decreased from 0.11million tonnes in 1980 to 0.10 million tonnes in 1989. Later, the production of coffee increased and reached a level of 0.27 million tonnes in 2001 and decreased by 0.23 million tonnes in 2008. In 2010, the production of coffee jumped to and reached a level of 0.30 tonnes (see Table 4.1). Some of the factors responsible for the decrease in the production of coffee in India include periodic adverse weather conditions, price drop in the value of coffee from the year 2003-2006 which led lower investment in coffee plantation, the World coffee crises from 1999-2004, periodic price drop in domestic and international market ultimately resulted to lower the

[3] The trend in composition of coffee in the present study indicates the type of coffee in which its trend is being examined viz., coffee Arabica, coffee Robusta, green coffee and value added products of coffee mainly Roasted coffee and soluble coffee.

Table 4.1: Trend in production of coffee in India and Ethiopia (1980-2010), (Unit in million tons)

Year	Production (in million tons)		Year	Production (in million tons)	
	India (A,R)	Ethiopia (A)		India (A,R)	Ethiopia (A)
1980	0.118	0.198	1995	0.223	0.196
1981	0.162	0.193	1996	0.205	0.175
1982	0.133	0.224	1997	0.228	0.165
1983	0.087	0.233	1998	0.265	0.210
1984	0.196	0.139	1999	0.292	0.187
1985	0.094	0.170	2000	0.262	0.243
1986	0.217	0.178	2001	0.276	0.246
1987	0.116	0.173	2002	0.287	0.264
1988	0.182	0.162	2003	0.332	0.313
1989	0.107	0.206	2004	0.250	0.287
1990	0.170	0.175	2005	0.245	0.333
1991	0.180	0.184	2006	0.274	0.358
1992	0.169	0.108	2007	0.259	0.297
1993	0.212	0.172	2008	0.237	0.416
1994	0.180	0.152	2009	0.288	0.450
1995	0.223	0.172	2010	0.302	0.196

Growth in production of Coffee in India, Ethiopia and World, 1980 to 2010

Growth and year to year variation of production	India (A/R)		Ethiopia (A)	
	CAGR (% p.a.)	CV (%)	CAGR (%p.a.)	CV (%)
Production from 1980-1990(% p.a.)	0.71 (0.602)	30.37	-0.66(0.306)	14.8
Production from 1991-2010(% p.a.)	1.01 (0.000)	17.7	2.55 (0.000)	37.4
Production from 1980-2010(% p.a.)	1.42 (0.000)	31.5	1.08	35.7
Mean annual production from 1980-2010 (in million tons)	0.21 (0.000)	31.5	0.22(0.000)	35.7

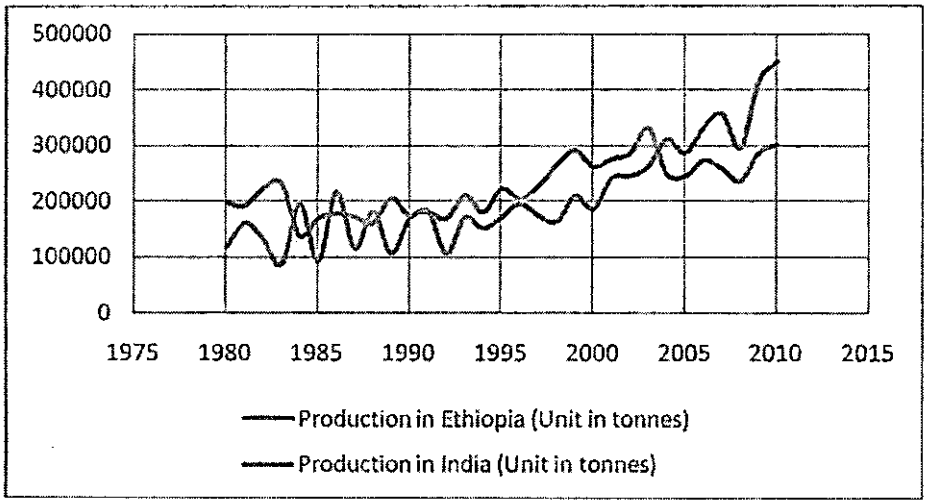
Source: ICO. (Figures are the researcher's calculation based on the data collected from ICO)

NB: a) * denotes the growth is significant at 5 percent
b) A denotes Coffee Arabica, R denotes Coffee Robusta
c) Figures in parenthesis are P Values for CAGR from 1980-2010
d) World mean production volume accounted 0.062 million tons at CAGR of 61 percent with CV 15 percent
e) Figures in parenthesis are the P Value of CAGR of production from 1980-2010
f) Coffee trade is not liberalized, thus growth rate can't be taken as a reference point for Ethiopia

prices paid to coffee growers and recently since 2008, the purchasing power of coffee farmers who make intensive use of imported fertilisers has fallen as the price of fertilisers spiked and significantly increasing the cost operation for coffee growers.

Additionally, the continuous ravages of white stem borer and leaf rust spelled doom for Arabica plantations whose area started declining alarmingly during the 1980s. This necessitated the introduction of tolerant Robusta from Indo-China region towards the 1900's and initiations of research efforts to search for remedial measures (Coffee Board of India [n.d]) are the factors responsible for the variation in the trend of coffee production in India.

Figure 4.1: Trend in total production of coffee in India and Ethiopia from 1980-2010(Unit in tonnes)



A study conducted by Abbas and Indira (2013) noted that, the responsible factors for the decrease in production of coffee in India during pre and post liberalization period were due to replanting of some of old trees with the liberal assistance provided by Coffee Board, low prices of coffee in domestic and international market, less attention of growers for plant protection, irrigation, rejuvenation and replanting affected in coffee production during the years. India witnessed a positive significant incremental compound annual growth of 1.42 percent in the production of coffee for the past 30 years (1980 to 2010). It was noted that, the highest volume coffee production was recorded in the year 2003 (0.33 million tonnes) while, the lowest volume was in the year 1983 (0.087 million tons) (see Table 4.1). The average coffee production in India increased from 0.14 million tonnes in pre-liberalization to 0.24 million tonnes in post liberalization period. This clearly shows the positive impact of trade liberalization on coffee production. The growth rate noted in the production of coffee during pre-liberalization period was 71 percent. However, it increased to 101 percent during post-

liberalization period, showing a considerable increase in the production during post liberalization period. The Co-efficient of Variation changed during pre and post liberalization period. While, the variation noted during pre-liberalisation was higher (30.37 percent) than the variation noted during post-liberalization period (17 percent), showing lesser year to year fluctuations. From 1991 onwards coffee production in India witnessed incremental growth which may be due to increase in area from 190076 hectares in the year 1980 to 360485 hectare in the year 2010 and increase in productivity from 624kg/ha in 1980 to 838kg/ha in 2010 (Coffee Board of India.2014).

Similarly, the trends in the production of coffee in Ethiopia increased from 0.19 million tons in 1980 to 0.20 million tons in 1989. Later the production of coffee decreased and reached a level of 0.10 tons in 1992. In 2010 the production of coffee jumped to and reached a level of 0.45 million tons. The country accounted a mean annual production of 0.22 tons of coffee witnessing significant positive incremental growth of 1.08 percent with coefficient of variation of 35.7 percent from the year 1980-2010. The decrease in the volume of coffee production in Ethiopia was mainly due to the seasonal climatic variations which adversely impact the coffee productivity and so do with prices. Some of the major factors attributed for the year to year variation in the production of coffee in Ethiopia including the oversupply of coffee in the international market particularly from Brazil and Vietnam from 1999-2004 marked as the world coffee cries, which led to export earnings fall and hundred thousand of farmers forced to run out of coffee business (Fair Trade Foundation.2012). Additionally, periodic adverse weather conditions such as drought or frost affected the critical flowering stage of coffee that determines the subsequent crop and coffee disease like borer. On the other hand, factors attributed for the growth in production of coffee in Ethiopia include the increase in the number of organized farmers cooperative union in the country, increase in area covered with coffee plant, increase in productivity, the increase in the prices paid to coffee growers, the removal of quota system which was imposed by ICO that subjected to export more and stimulated the domestic supply.

Agricultural Cooperatives in Ethiopia (ACE) project which supported the establishment of secondary level unions, expanded farmers' access to purchasing and distribution of Agricultural product (Coffee) in its initial implementation, aided the Oromia, Sidama, Yergacheffe and Kafa Coffee Farmers' Cooperative Unions in 1999 as groundbreaking

initiative by getting permission from the Government to bypass the central coffee auction and act as direct exporters on behalf of their members (ACDI/VOCA.2015).

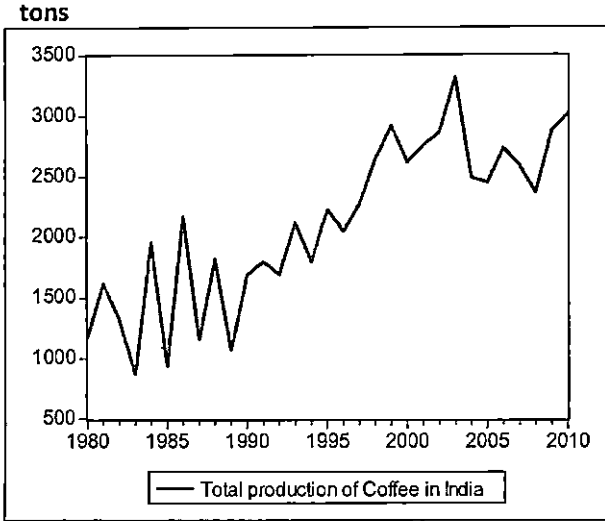
According to ECX (2008), the growth in coffee production supply in the country mainly attributed to improvement in productivity (increase yield per hectare) and partly due to good distribution and amount of rainfall and due to increase in the area of land-covered with coffee that started to give production. Additionally, according to the annual agricultural sample survey of the Ethiopian CSA (n.d), the growth in production of coffee was resulted due to increase in the area covered with coffee plant with increase in productivity.

Between the years 1980s and 1990s a huge production increase in Brazil and especially in Vietnam was mainly due to government investment in expansion of the coffee export sector projected Vietnam from an insignificant producer to the world's second largest producer after Brazil. The resulting oversupply of coffee in Brazil and Vietnam also led 1999-2004 coffee crises. This disastrous period saw the price of Arabica fall to a 30 years low of 45 cents a pound in 2001 with devastating social, economic and political consequences for countries throughout Africa, Asia and Latin America. Export earnings fell from around $10bn to $6bn, reducing rural incomes and trapping coffee farmers and their families in chronic poverty. Hundreds of thousands of coffee farmers were forced out of business, many abandoning their farms in search of work in cities or migrating to neighbouring countries, along with thousands of landless plantation workers (Fair Trade Foundation, 2012). As a result, the production of coffee in India and Ethiopia registered low volume for the year 2003 and 1992, respectively from the total thirty years period. Additionally, coffee trees require specific climatic conditions to produce an optimum crop. Production is often disrupted by adverse weather such as drought or frost which can affect the critical flowering stage that determines the size of the subsequent crop.

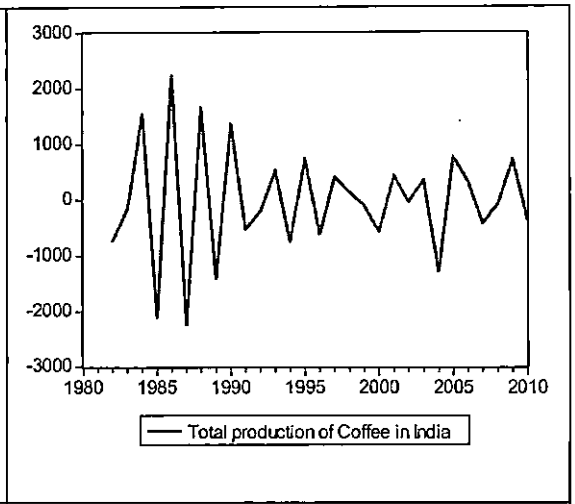
Conclusively, the trends in the production of coffee in India and Ethiopia from 1980-2010 influenced by different factors such as the internal coffee market supply by major coffee producer countries, unfavourable weather conditions and coffee diseases and quota system which was imposed by ICO etc.

This result was further tested by converting the data into stationary using URT and ADF test. Accordingly, GARCH model was fitted and the results generated are displayed in the following figure.

Figure 4.2: ADF result for the trends in total volume of coffee production in India, 1980-2010 in tons



Before converting the time series to stationarity



After converting the time series to stationarity

Based on the time series data for coffee production in India from 1980-2010, the trend line indicated that the time series data was non stationary. However, after second difference, the line graph shows that the series achieved a constant mean and constant variance. Thus, the second difference series of coffee production in India achieves stationarity. The result from the above graph indicates that the year to year variation exhibited in the pre-liberalisation period was higher than during the post liberalisation.

The result which was detected by ADF test statistics indicated that the null hypothesis was rejected at critical value of -3.2 at 10 percent, -3.6 at 5 percent, and -4.374307 at 1 percent given the condition that critical values are greater than the value of the test statistics (-12.72) (See Appendix1).

GARCH-ARCH result for total production of coffee in India from 1980-2010

Dependent Variable: Total production

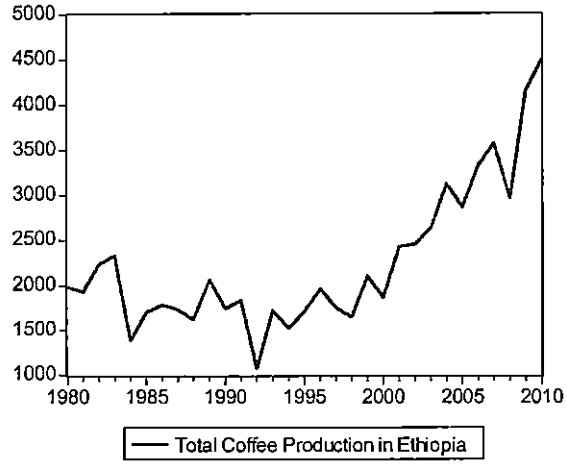
GARCH = C(2) + C(3)*RESID(-1)^2 + C(4)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
@SQRT(GARCH)	2.899302	0.620545	4.672187	0.0000
	Variance Equation			
C	307853.9	249542.1	1.233675	0.2173
RESID(-1)^2	0.224059	0.201193	1.113655	0.2654
GARCH(-1)	0.059765	0.388573	0.153806	0.8778

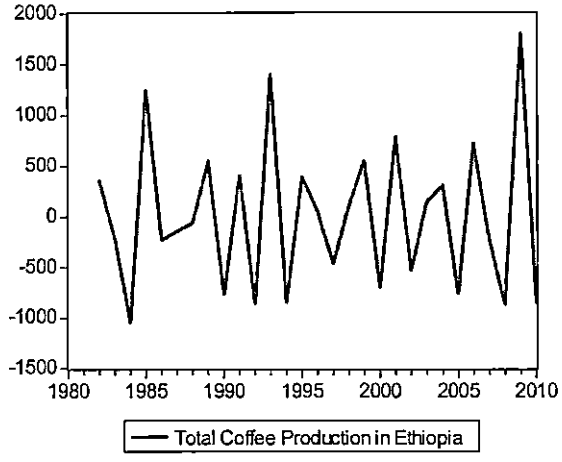
The ARCH coefficient of the GARCH (1, 1), result indicates that there is significant long run persistence of volatility (variation) in the volume of coffee production in India as the sum of the ARCH and GARCH coefficients, $\alpha + \beta < 1$, (0.22+ 0.06= 0.28), thus, the year to year variability strength in the production of coffee in India for the past three decade (1980-2010) was found not persistent and under the GARCH model, consequently, there is no covariance stationarity.

Conclusively, though, the coefficient of variation in the volume of coffee production in India found 31.57 percent, however the persistence level of its variation was found to be less or not persistent as shown in the result detected by the GARCH model.

Figure 4.3: ADF result for the trend in total production of Coffee in Ethiopia, 1980-2010 (00 tons)



Before converting the time series to stationarity



After converting the time series to stationarity

Based on the time series data for coffee production in Ethiopia from 1980-2010, the trend line indicated that the series was non stationary. However, after second difference the line graph shows that the series have a constant mean and constant variance, which implies that the second difference series of coffee production in Ethiopia achieve stationarity (see Appendix 3).

Before running the ARCH/GARCH model to check the existence of unit root problem, the ADF test was fitted to the time series data of the total production of coffee in Ethiopia and the result which was detected by ADF test statistics indicated that the null hypothesis was rejected at critical value of -2.63 at 10 percent, -2.981038 at 5 percent, and -3.711457 at 1

percent given the condition that critical values are greater than the value of the test statistics (-11.6).

GARCH- ARCH result for total volume of coffee production in Ethiopia 1982-2010

Dependent Variable: Total production

GARCH = C(2) + C(3)*RESID (-1)^2 + C(4)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
@SQRT(GARCH)	0.032367	0.115636	0.279908	0.7795
	Variance Equation			
C	343775.1	253299.1	1.357191	0.1747
RESID(-1)^2	0.702809	0.521344	1.348073	0.1776
GARCH(-1)	-0.364488	0.542082	-0.672384	0.5013

Since the unit root test discovered that there is no unit root problem against the series and model specification, a GARCH (1, 1) model was fitted to capture the uncaptured non-linear ARCH effects present in the series. The ARCH coefficient of the GARCH (1, 1), α was found positive and statistically significant, which indicates that there was significant short run volatility persistence (i.e. there is significant ARCH effects in the total production of coffee in Ethiopia time series data). The estimate of β, the GARCH coefficient, which represents the contribution of shocks to long run volatility persistence, has a negative value. This means that there is no significant long run persistence in volatility (variation) in the production volume of coffee in Ethiopia. It is concluded that since the sum of the ARCH and GARCH coefficients, $\alpha + \beta < 1$, (0.70 + -0.36= 0.34) volatility shock in the production of Coffee in Ethiopia for the past three decades (1980-2010) is not persistent and under the GARCH model, there is no covariance stationarity. Conclusively, though, the coefficient of variation in the volume of coffee production in Ethiopia was found at 35.77 percent level of year to variation in the volume of production. However, its persistence level was found less or not persistent as shown by the result which was detected by the GARCH model.

4.1.2. Trends in domestic consumption of coffee in India and Ethiopia (Crop years 1980 to 2010)

Table 4.2: Trend in domestic consumption of coffee in India and Ethiopia (Unit in million tons)

year	Domestic consumption in India (in million tons)	% share of domestic consumption to production in India	Domestic consumption in Ethiopia (in million tons)	% share of domestic consumption to production
1980	0.050	42.5	0.075	38.1
1981	0.065	39.9	0.086	44.6
1982	0.055	41.5	0.084	37.6
1983	0.038	43.6	0.093	39.9
1984	0.055	28.1	0.087	62.6
1985	0.032	34.2	0.068	40.0
1986	0.078	36.0	0.075	42.0
1987	0.049	42.0	0.074	42.5
1988	0.064	35.2	0.084	52.2
1989	0.040	37.4	0.102	49.4
1990	0.054	31.9	0.064	36.9
1991	0.055	30.6	0.050	27.5
1992	0.055	32.5	0.044	40.9
1993	0.050	23.6	0.070	40.7
1994	0.050	27.7	0.089	58.2
1996	0.050	24.4	0.077	44.6
1997	0.050	21.9	0.110	56.2
1998	0.050	18.9	0.119	67.9
1999	0.055	18.8	0.115	69.8
2000	0.060	22.9	0.109	51.9
2001	0.064	23.2	0.119	63.6
2002	0.068	23.7	0.083	34.0
2003	0.070	21.1	0.123	50.2
2004	0.075	30.1	0.134	50.7
2005	0.080	32.7	0.149	47.8
2006	0.085	31.1	0.146	50.9
2007	0.090	34.7	0.176	52.9
2008	0.094	39.8	0.156	43.6
2009	0.102	35.5	0.171	57.6
2010	0.105	34.8	0.111	26.7

Growth in volume of domestic consumption of coffee in India, Ethiopia 1980-2010		
Country	**India (A, R)**	**Ethiopia**
Mean domestic consumption (in million tons from 1980-2010)	0.062	0.11
CV (%)	29.35	34.59
CAGR (% p.a.)	0.96	1.14
P-value	8.99E-06	4.58498E-06

Source: ICO. (figures are the researcher's calculation based on the data collected from ICO)
NB: A denotes Coffee Arabica and R denotes Coffee Robusta,
World mean domestic consumption accounted 0.15 million tons at CAGR of 117 percent with CV 28.02%

The trend in domestic consumption of coffee in India and Ethiopia for the past three decades (1980-2010) was assessed. Additionally, the trend in the share of domestic consumption of coffee to the total domestic supply of coffee in the two countries was taken in to account to substantiate the discussion.

The total domestic consumption of coffee in India for the year 1980 accounted for 0.049 million tons and increased to 0.10 million tons for the year 2010. It is evident that the country witnessed an increase in the volume of domestic consumption of coffee by 0.055 million tons from 1980 to 2010. India registered the highest (0.10 million tons) volume of coffee which was domestically consumed in the year 2010 while, the lowest (0.03 tons) volume was in 1985 (See Table 4.2).

The mean domestic consumption of coffee in India accounted for 34 percent of the mean total production in the country from the year 1980-2010. India witnessed a positive incremental growth of 96 percent per annum in the domestic consumption of coffee for the study period. The year to year variation exhibited in the volume of domestic consumption of coffee in India witnessed coefficient variation of 29.35 percent. However, the Secretary of Coffee Board of India (interviewees) has noted that "the domestic consumption of coffee in India is being shifted from green coffee to value added coffee products".

There are signs that the popularity of coffee is increasing with the spread of both foreign and home-grown coffee shops and restaurant chains. A report made by Global Agricultural Information Network (2014) illustrated how the domestic consumption of coffee in India is influenced by hundreds of western coffee shops which have emerged across the country's major and smaller cities (Viz., Barista Lavazza, Café Coffee Day, Costa Coffee, Café Pascucci, Di Bella Coffee India, Gloria Jean's, The Coffee Bean & Tea Leaf, Javagreen, Mocha, Brewberrys Café, Coffee N U, Dunkin Donuts, BRU World Café, Cuppa Joe, Starbucks, McCafe, Qwiky's Coffee and Coffee World) over the past decade (2000s). Thus, coffee now competes with the dominant tea in these cafes, especially among younger consumers. A growing willingness to consume food and drink outside their home and increasing disposable income have helped to fuel growth in recent years, but the pace of expansion appears to have slowed in recent years.

Some of the factors responsible attributing for the year to year variation in the volume of domestic consumption of coffee in India includes the willingness of consumers to consume food and drink outside their home, increasing disposable income, the emergence of western coffee shops across the country and increase in population size. Additionally, the present study found that the increase or decrease in the volume of coffee production in the country reflected in the rise or drop in the volume of domestic consumption of coffee during pre-liberalisation period.

Furthermore, the present study found that India's annual per capita coffee consumption is just 25 grams for the year 2010, quite low when compared to the annual per capita coffee consumption in Ethiopia, which is 5.1 kilograms.

Similarly, the domestic consumption of coffee in Ethiopia witnessed a positive incremental growth of 114 percent from 1980 to 2010 with a mean domestic consumption volume of 0.11million tons of coffee. It was further noted that Ethiopia registered the highest volume of domestic consumption of coffee (0.20 million tons) during the year 2010 whereas, the lowest (0.07 million tonnes per annum) was during the years 1987 to 1988. The trend in the share of domestic consumption to total production has witnessed a higher coefficient of variation (34.59 percent) against the variation noted in the domestic consumption of world coffee producing countries, which was 28.02 percent. Ethiopia accounted more than 60 percent of the entire African countries domestic consumption of coffee with incremental growth.

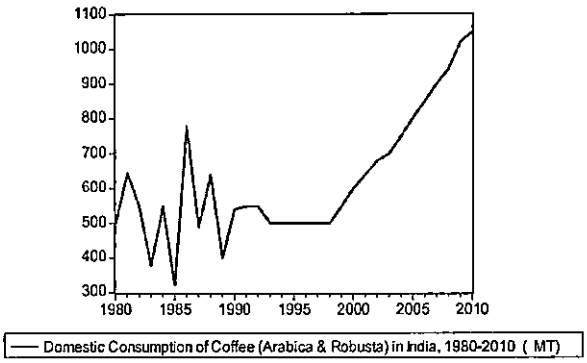
Factors attributed for the variation exhibited in the volume of coffee in Ethiopia was influenced by the volume of production as observed a decrease in production for the year 1987 resulted in decrease in domestic consumption, the continued growth in the population size; and fluctuation of coffee prices both in the international and domestic market. Most importantly, the Ethiopia's uniqueness from African countries by having strong domestic consumption culture, which frequently account half of the coffee production in the country attributed positively to the variation in the volume of domestic consumption of coffee.

The study found that in addition to Ethiopia being the birth place of coffee Arabica (National Coffee Association, USA, 1911), it is also the leading coffee producer country in Africa and ranks ninth in the global coffee production (for the year 2012). The domestic consumption of coffee in Ethiopia accounted for 51 percent of the mean production, representing above 50

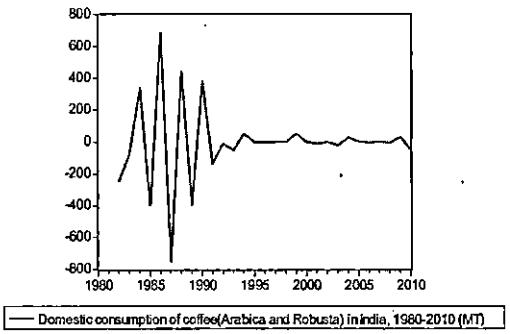
percent of the total domestic consumption in the African continent and 5-8 percent of the World exporting countries domestic consumption from 1980-2010.

Generally, the trend in domestic consumption of coffee in India and Ethiopia witnessed a positive incremental growth for the study period (1980 to 2010). It was also noted that in Ethiopia domestic consumption is higher than that of in India. However, both India and Ethiopia witnessed above the mean volume (0.032 million tons) [4] of the World coffee exporting countries domestic consumption from the year 1980 to 2010 (see Table 4.2).

Figure 4.4: ADF results for the trends in domestic consumptions of coffee in India, 1980-2010 (00 tons)



Before converting the time series to stationarity



After converting the time series to stationarity

The trend line graph of the total volume of domestic consumption of coffee in India from 1980-2010 indicated that the series were non stationary. However, after second difference the graph shows the series have a constant mean and constant variance which implies that its second difference of the series achieved stationarity before running the GARCH model.

The ADF test was computed to the time series data, volume of domestic consumption of coffee in India to examine existence of unit root problem in the time series data. ADF test statistics detected that the null hypothesis was rejected since the result was consistent at critical value of -3.2 at 10 percent, -3.6 at 5 percent, and -4.4 at 1 percent while, the critical values are greater than the value of the test statistics (-16.15) (see Appendix 4).

[4] *The mean volume of domestic consumption of the world coffee exporting countries were calculated by summing the world's coffee exporting countries domestic consumption from 1980 to 2010 which is 1530230.32 tons and divided by the total 47 coffee exporting countries.*

GARCH-ARCH result for domestic consumption of coffee in India 1982 2010

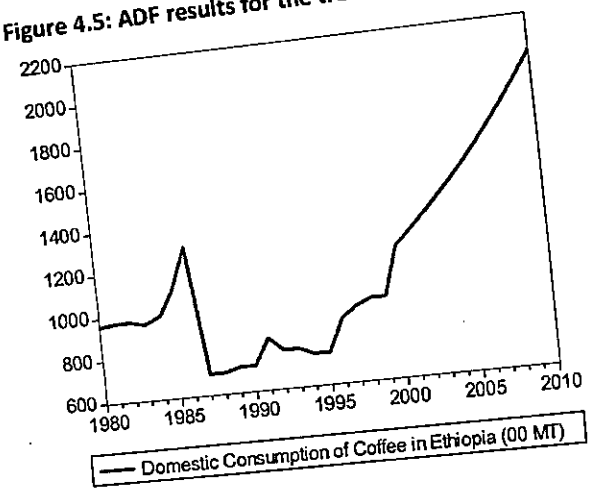
Dependent Variable: D2DC
GARCH = C(2) + C(3)*RESID(-1)^2 + C(4)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
@SQRT(GARCH)	-0.032054	0.170919	-0.187541	0.8512
	Variance Equation			
C	42399.63	24804.87	1.709327	0.0874
RESID(-1)^2	1.048464	0.628273	1.668802	0.0952
GARCH(-1)	-0.397256	0.496188	-0.800616	0.4234

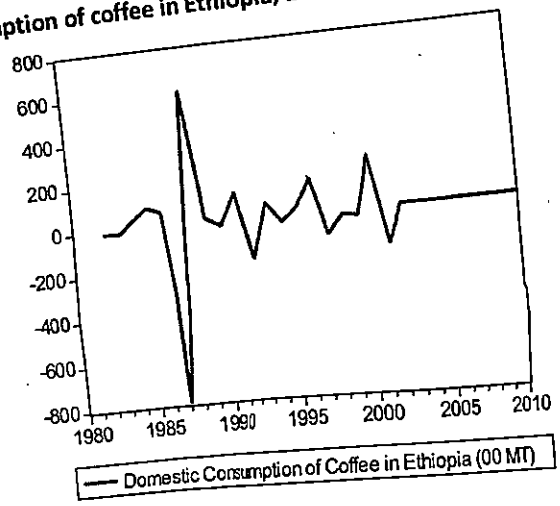
NB: DC denotes the volume in domestic consumption of coffee in India

The ARCH and GARCH coefficients, $\alpha + \beta < 1$, (1.05+ -0.39 = 0.65), thus, the model detected that the volatility shock exhibited in the year to year variation in the volume of domestic consumption of coffee in India from 1980-2010 found was not persistent.

Figure 4.5: ADF results for the trends in domestic consumption of coffee in Ethiopia, 1980-2010 (in 00 tons)



Before converting the time series to stationarity



After converting the time series to stationarity

The trend line graph of the total volume of domestic consumption of coffee in Ethiopia from 1980-2010 indicated that the series were non stationary. However, after second difference the graph shows the series has a constant mean and constant variance which implies that the second difference of the time series achieved stationarity before running the GARCH model (fig. 11). The trend line graph shows that the year to year variation in the domestic consumption of coffee in Ethiopia was higher from 19[illegible]-2002 while the year to year variation decreased from the year 2003-2010.

The ADF test was computed to the time series data of total volume of domestic consumption of coffee in Ethiopia to examine existence of unit root problem in the series. ADF test statistics detected that the null hypothesis was rejected since the result was consistent at critical value of -3.2 at 10 percent, -3.6 at 5 percent, and -4.3 at 1 percent while, the critical values are greater than the value of the test statistics (-10.75) (see Appendix 5).

GARCH-ARCH result of domestic consumption of coffee in Ethiopia 1981-2010

Dependent Variable: Domestic consumption

GARCH = C(2) + C(3)*RESID(-1)^2 + C(4)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
@SQRT(GARCH)	0.281812	0.419183	0.672289	0.5014
	Variance Equation			
C	11906.36	18984.21	0.627172	0.5305
RESID(-1)^2	-0.057067	0.009213	-6.194367	0.0000
GARCH(-1)	0.510562	0.827595	0.616923	0.5373

The ARCH and GARCH coefficients, $\alpha + \beta < 1$, (-0.06 + 0.51= 0.45), thus, the model detected that the volatility shock exhibited in the year to year variation in the volume of domestic consumption of coffee in India from 1980-2010 was found not persistent.

Conclusively, though the strength of volatility shock in the year to year variation in volume of domestic consumption of coffee in India and Ethiopia was found not persistent, however, the variation exhibited in India was higher than that in Ethiopia for the study period.

4.1.3. Trends in exports of coffee in India and Ethiopia (Crop years 1980 to 2010)

The export volume of coffee export from India substantially increased from 99300 tons in the year 1980 to 353940 tons during the year 2010 (Table 4.3). Coffee export in India, which accounted for just 69 percent of total production of coffee in the country during pre-liberalization, contributed 80 percent of total production of coffee during post-liberalisation period (1991-2010). Moreover, India secured mean export volume of 0.16 million tons, which is the average of 76 percent of the total production of coffee in the country for the study period.

Table 4.3: Trend in coffee export from India and Ethiopia (Unit in million tons), (crop years 1980- 2010)

	Exports (in million tons)		Percentage share of export to production	
Year	Ethiopia	India	India	Ethiopia
1980	0.099	0.075	38	84
1981	0.090	0.086	45	56
1982	0.069	0.084	38	52
1983	0.067	0.093	40	77
1984	0.077	0.087	63	39
1985	0.102	0.068	40	108
1986	0.095	0.075	42	44
1987	0.083	0.074	43	71
1988	0.115	0.084	52	63
1989	0.122	0.102	49	114
1990	0.091	0.064	37	53
1991	0.121	0.050	27	67
1992	0.109	0.044	41	64
1993	0.174	0.070	41	82
1994	0.124	0.089	58	69
1995	0.214	0.077	45	96
1996	0.149	0.110	56	72
1997	0.221	0.119	68	97
1998	0.206	0.115	70	78
1999	0.258	0.109	52	88
2000	0.222	0.119	64	85
2001	0.206	0.083	34	75
2002	0.214	0.123	50	75
2003	0.230	0.134	51	69
2004	0.167	0.149	48	67
2005	0.205	0.146	51	83
2006	0.204	0.176	53	74
2007	0.203	0.156	44	78
2008	0.177	0.171	58	75
2009	0.256	0.111	27	89
2010	0.354	0.199	44	117

Growth in export volume of coffee from India and Ethiopia (crop years 1980- 2010)

Country	India (A, R)		Ethiopia (A)	
Growth and year to year variation of export	CAGR (% p.a.)	CV (%)	CAGR (% p.a.)	CV (%)
Export from 1980-1990(% p.a.)	1.15 (0.0156)	19	-1.205 (0.093)	15.8
Export from 1991-2010(% p.a.)	1.37 (0.000)	27	2.35 (0.000)	32
Export from 1980-2010(% p.a.)	1.90 (0.000)	43	1.14 (0.000)	34.59
Mean export from 1980-2010 (in million tons)	0.16 (4.08E-11)		1.13 (4.08E-11)	

Source: ICO. (Figures are the researcher's calculation based on the data collected from ICO)

NB: a) A denotes Coffee Arabica, R denotes Coffee Robusta

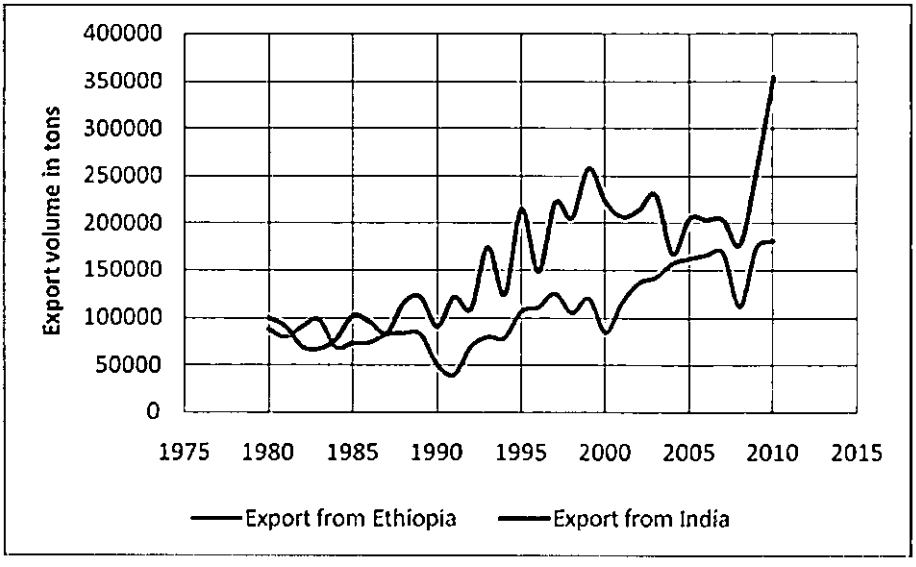
b) Figures in parenthesis are P Values

c) World mean export volume from 1980-2010 accounted for 0.048 at CAGR of 65 percent with CV 15 percent.

d) Coffee trade in Ethiopia is not liberalized, thus growth rate can't be taken as a reference point for interpretation.

Furthermore, coffee export from India witnessed a positive incremental growth at the rate of 190 percent from 1980-2010, which is above the growth rate noted in the World average coffee export volume (65 percent). The growth noted during post-liberalisation period was higher than that of pre-liberalisation period. However, the year to year variation noted during post-liberalisation was higher than the variation during the pre-liberalisation period. The variation exhibited in India in the export volume of coffee for the study period was 43 percent, which was much higher than the coefficient of variation (14.6 percent) noted in the world coffee export volume (see Table 4.3).

Figure 4.6: Export volume of coffee from India and Ethiopia from 1980-2010

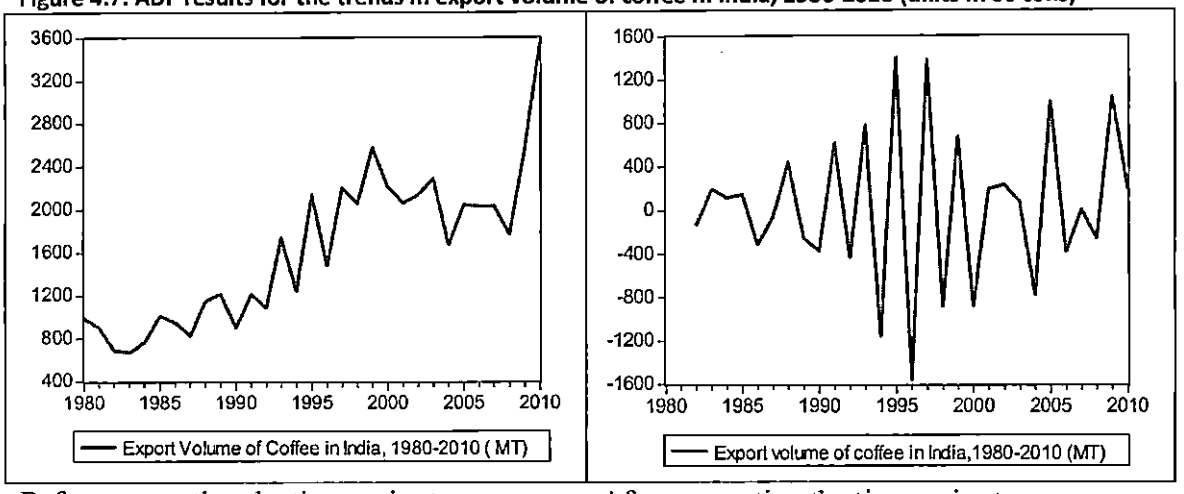


Trends in the export of coffee in India decreased from 0.099 million tons in 1980 to 0.087 million tons in 1984 and later increased to 0.11 million tons during the year 1988. The export of coffee increased and reached a level of 0.20 million tons in 1998 and then decreased to 0.15 million tons in the year 2004 and then increased and reached a level of 0.27 million tons. Later the export volume witnessed an increasing trend from the year 2008 onwards and export jumped to and reached a level of 0.35 million tons in the year 2010 (see Table 4.2).

Factors responsible for the year to year variation of coffee export in India include periodic decrease in domestic supply of coffee, over supply of coffee in the international market particularly from Brazil and Vietnam which ultimately resulted in reduction of the prices of coffee and the 1989-1994 decline in the world coffee prices that followed the collapse of ICO quota system. Furthermore, the collapse of Soviet Union in 1991 led to collapse of the barter

trade agreement between the two countries (Takamasa A. 2001). Recently, due to the weak European demand particularly buyers from Germany, Italy, Spain, Greek and Portugal were looking for cheap coffees. Moreover, there is a shift from green coffee export to value added coffee export, which contributed in the decrease in the volume of green coffee exports.

Figure 4.7: ADF results for the trends in export volume of coffee in India, 1980-2010 (units in 00 tons)



Before converting the time series to stationarity

After converting the time series to stationarity

Given the time series data of the volume of coffee export from India (1980-2010), the trend line graph indicated that the time series data was non stationary. However, after second difference, the trend line graph detected that the series have a constant mean and constant variance, which implies its second difference achieved stationarity.

The ADF-URT was computed to the time series data on the volume of coffee export from India before fitting the ARCH/GARCH model in order to assess the existence of unit root problem in the time series. Accordingly, the result detected by ADF test statistics signalled that the null hypothesis was rejected at critical value of -3.2 at 10 percent, -3.6 at 5 percent, and -4.4 at 1 percent given the condition that critical values are greater than the value of the test statistics (-8.2) (see Appendix 7).

GARCH/ARCH result for the volume of coffee export from India from 1982-2010

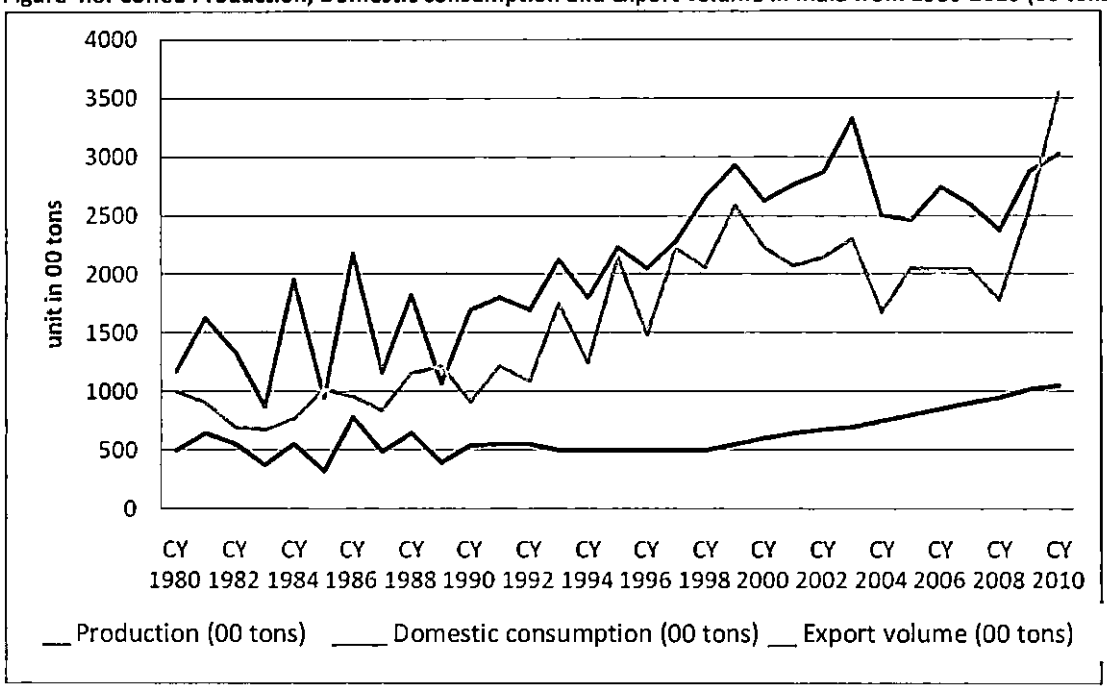
Dependent Variable: D2EX
GARCH = C(1) + C(2)*RESID(-1)^2 + C(3)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
	Variance Equation			
C	203295.0	162201.4	1.253349	0.2101
RESID(-1)^2	0.836888	0.794397	1.053489	0.2921
GARCH(-1)	-0.240467	0.427978	-0.561866	0.5742

NB: EX indicates export volume of coffee from India

The ARCH and GARCH coefficients result found that $\alpha + \beta < 1$, (0.83+ -0.24=0.59), thus, the model detected that the volatility shock exhibited in the year to year variation in the volume of coffee export from India from 1980-2010 found was not persistent.

Figure 4.8: Coffee Production, Domestic consumption and Export volume in India from 1980-2010 (00 tons)

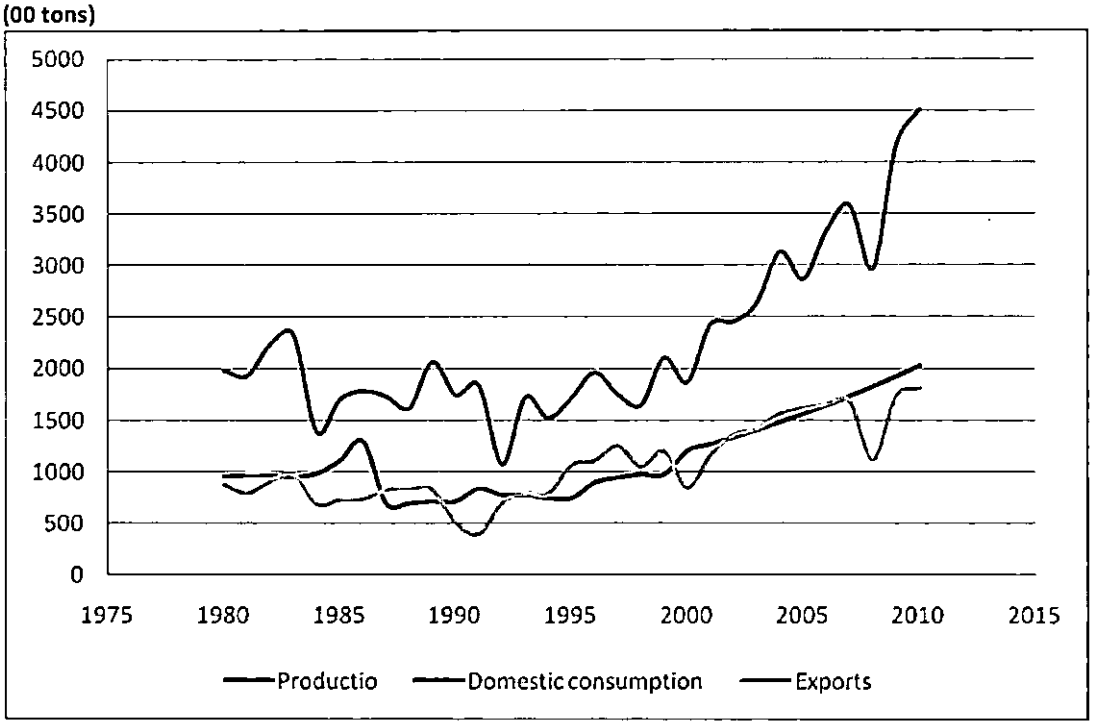


It is evident from figure 4.8 above that the export volume surpassed the total production volume in the country for the year 1989 and also in 2009 and 2010 during the study period. It was further noted that from the year 1989 onwards the year to year variation exhibited in the volume of coffee exports were influenced by the volume of coffee production. This study it was noted that the increase in production of coffee in India reflected in the rise or drop of export and domestic consumption volume during pre-liberalisation period. However,

domestic supply of coffee did not reflect on the rise or drop in the volume of domestic consumption of coffee during post-liberalisation (see figure 4.8).

Similarly, figure 4.9 indicates that the trends in the export of coffee from Ethiopia decreased from 0.08 million tons in 1980 to 0.04 million tons in 1991 and later increased 0.16 million tons in the year 2007 while, export fallen to 0.11 million tons during the year 2008. Coffee export in Ethiopia, accounted for 43 percent and 51 percent of the total production of coffee in the country from 1980-1990 and 1991 to 2010, respectively. However, Ethiopia secured mean export volume of 0.16 tons, above the mean (0.10 million tons[5]) of World coffee exporting countries coffee export volume, which accounts an average of 48 percent of the total domestic supply of coffee for the study period. The country witnessed a positive and statistically significant incremental growth in the quantity of coffee exported for the past three decades (1980-2010) at compound annual growth rate of 113 percent; the growth was higher than the World export average compound annual growth rate (0.65 percent).

Figure 4.9: Total coffee Production, domestic consumption and export volume in Ethiopia from 1980-2010 (00 tons)



However, export witnessed a negative incremental growth prior to 1990s while, it was noted an incremental growth after 1990s. Furthermore, the year to year variation exhibited in the

[5] *The average (102293.85 tons) quantity of coffee export from the world coffee exporting countries was calculated as the world total coffee export volume (4807811 tons) for the study period divided by the total 47 coffee exporting countries.*

export volume of coffee for the study period accounted for 34.6 percent, higher than the coefficient of variation (14.59 percent) noted in the world coffee export volume (see Table 4.3). Several variables are responsible for the year to year variations exhibited in the volume of coffee export from Ethiopia. The important reasons are the recent decline in the volume of coffee exports was mainly due to a weak European demand, particularly from European nations like Germany, Italy, Spain, Greece and Portugal as buyers in these countries were looking for cheaper coffees.

This study also noted that, the increase or decrease in the volume of coffee production in Ethiopia had directly reflected in the rise or drop of export volume of coffee (see figure 4.9). Furthermore, the political instability in the neighbouring country in 1998, periodic falls in output, volatile international price, the high pressure of supplying domestic market, over supply of coffee by major coffee exporter countries Viz., Vietnam and Brazil resulted to drop the prices of coffee, from 1989-1994, the decline in the world coffee prices that followed the collapse of the ICO quota system, from 1999-2004, the world coffee crises, the recent 2008 world economic crises which subjected coffee prices to fall down are some of the responsible factors which attributed negatively the variation in the export volume of coffee from Ethiopia. The results are consistent with a study which was conducted by Ecobank (2014) on middle Africa briefing note on soft commodities.

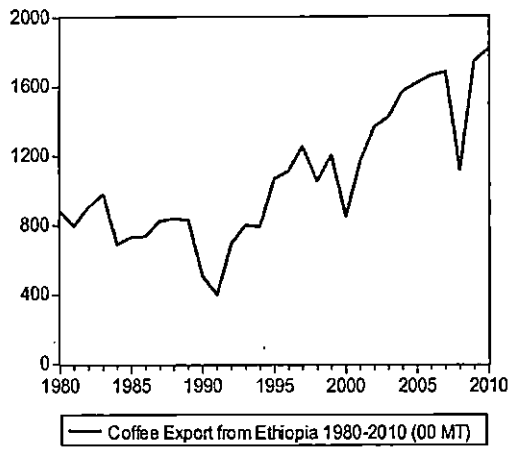
On the other hand, the factors that contributed to increase the export volume of coffee in Ethiopia include the government's effort in promoting the Brand of Ethiopian coffee, registering the trade mark as the brand of Ethiopian coffee with their geographic indication(GI), the involvement of MNC in the export market supply chain and other stakeholders like ACDI-VOCA which helped the coffee farmers to directly involve in the export process, the good will of the brand of Ethiopian coffee in the international market for its special cup quality which resulted from the country's geographic location suitability to grow high quality coffee Arabica are some.

There have been a number of changes regarding export taxes on coffee over time. Core changes include the removal of entry barriers (Proclamation No. 70/1993); the consolidation of all taxes and duties levied on coffee export into a single tax family (Proclamation No. 99/1998), which consolidated all taxes on coffee export to 6.5 percent; and, following the 2002 international coffee crisis, the waiving of all export taxes on coffee exports. Ethiopian Fine Coffee Trademark Licensing Institute was set up in February 2005 with the purpose of

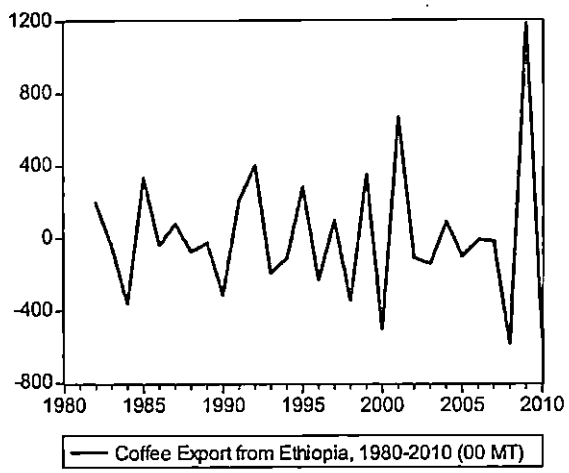
setting up a system to secure legal ownership in international markets of specialty coffee names (especially Sidamo, Harar, and Yirgacheffe) to add brand value to Ethiopian coffee. Signatories entered into a brand management strategy with the government with the purpose of achieving better farm-gate and export prices for coffee (Bart M. *et al.*, 2014).

Both India and Ethiopia secured export of coffee above the average (0.10 million tons) world coffee exporting countries coffee export volume from the year 1980 to 2010.

Figure 4.10: ADF results for the trends in the volume of coffee exported from Ethiopia, 1980-2010 (00 tons)



Before converting the time series to stationarity



After converting the time series to stationarity

Given the time series data on the volume of coffee export from Ethiopia from 1980-2010, the trend line graph indicates that the series were non stationary. However, after second difference, the trend line graph detected that the series have a constant mean and constant variance, which implies the second difference series of the volume of coffee exported from Ethiopia for the study period achieved stationarity.

The ADF test statistics signalled that the null hypothesis was rejected at critical value of -3.23 at 10 percent, -3.58 at 5 percent, and -4.33 at 1 percent, critical values are greater than the value of the test statistics (-12.83) (see Appendix 8).

4.1.4. Trends in prices paid to coffee growers in India and Ethiopia (Crop years 1980/81 to 2010/11

The trend of prices paid to coffee growers in India and Ethiopia was analyzed from 1980-2010. Whereas, the trend of prices paid to coffee Robusta growers in India analyzed from 1985-2010 due secondary data unavailability for the entire study period. Indian coffee Arabica and coffee Robusta growers realized an average price of 70.19 US Cents per Ib and 67.94 US Cents per Ib, respectively for the past three decades (1980-2010).

Table 4.4: Prices paid to coffee growers in India and Ethiopia from 1980-2010 (Unit US cent per Ib)

Year	Prices paid to coffee Arabica growers	Percentage growth in prices paid to coffee Arabica growers	Prices paid coffee Robusta growers	Percentage growth in prices paid to coffee Robusta growers	Prices paid to coffee Arabica growers	Percentage growth in prices paid to coffee Arabica growers
	Ethiopia	Ethiopia	India (R)	India (R)	India (A)	India (A)
1980	58.46		*	*	99.44	
1981	54.6	-6.6	*	*	84.29	-15.2
1982	70.04	28.3	*	*	79.88	-5.2
1983	46.09	-34.2	*	*	70.72	-11.5
1984	50.53	9.6	*	*	70.38	-0.5
1985	55.42	9.7	77.88		80.62	14.5
1986	75.76	36.7	71.65	-8.00	95.22	18.1
1987	44.77	-40.9	63.06	-11.99	77.75	-18.3
1988	59.89	33.8	63.63	0.90	88.93	14.4
1989	54.13	-9.6	46.27	-27.28	69.01	-22.4
1990	61.15	13.0	44.35	-4.15	66.75	-3.3
1991	68.25	11.6	40.65	-8.34	61.53	-7.8
1992	61.26	-10.2	39.77	-2.16	53.96	-12.3
1993	61.78	0.8	44.21	11.16	57.92	7.3
1994	112.4	81.9	56.46	27.71	78.41	35.4
1995	123.4	9.8	66.53	17.84	84.72	8.0
1996	73.01	-40.8	56.67	-14.82	78.32	-7.6
1997	94.32	29.2	76.3	34.64	130.18	66.2
1998	96.33	2.1	75.62	-0.89	99.47	-23.6
1999	67.74	-29.7	57.61	-23.82	67.44	-32.2
2000	56.42	-16.7	63.75	10.66	35.87	-46.8
2001	43.78	-22.4	43.82	-31.26	23.44	-34.7
2002	26.88	-38.6	39.61	-9.61	22.08	-5.8
2003	34.57	28.6	43.45	9.69	28.6	29.5

ARCH /GARCH Result for volume of coffee export from Ethiopia 1982-2010

Dependent Variable: D2EX

GARCH = C(1) + C(2)*RESID(-1)^2 + C(3)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
	Variance Equation			
C	73550.08	52730.23	1.394837	0.1631
RESID(-1)^2	0.661399	0.387128	1.708478	0.0875
GARCH(-1)	-0.196275	0.640136	-0.306615	0.7591

NB: EX denotes export volume of coffee from Ethiopia

The ARCH coefficient of the GARCH (1, 1), α was found positive and statistically significant which indicates significant short run volatility persistence (i.e. there is significant ARCH effects in the series). The ARCH and GARCH coefficients, $\alpha + \beta < 1$, (0.66` + - 0.19= 0.46), thus, the model detected that the volatility shock exhibited in the year to year variation in the volume of coffee export from Ethiopia from 1980-2010 was found not persistent.

Conclusively, the trends in coffee export from India and Ethiopia witnessed a positive incremental growth for the past three decades. However, the existing year to year variation in the volume of coffee export in two countries resulted mainly from the international market situation specifically, due to the oversupply of coffee from the world dominant coffee exporter countries, thus affecting the coffee export potential of India and Ethiopia to a certain extent. Similarly, the fall of the world coffee price, the recent economic depression in 2008, the World coffee crises are the major incidents which adversely affected the volume of coffee export in the two countries.

4.1.4. Trends in prices paid to coffee growers in India and Ethiopia (Crop years 1980/81 to 2010/11

The trend of prices paid to coffee growers in India and Ethiopia was analyzed from 1980-2010. Whereas, the trend of prices paid to coffee Robusta growers in India analyzed from 1985-2010 due secondary data unavailability for the entire study period. Indian coffee Arabica and coffee Robusta growers realized an average price of 70.19 US Cents per Ib and 67.94 US Cents per Ib, respectively for the past three decades (1980-2010).

Table 4.4: Prices paid to coffee growers in India and Ethiopia from 1980-2010 (Unit US cent per Ib)

Year	Prices paid to coffee Arabica growers	Percentage growth in prices paid to coffee Arabica growers	Prices paid coffee Robusta growers	Percentage growth in prices paid to coffee Robusta growers	Prices paid to coffee Arabica growers	Percentage growth in prices paid to coffee Arabica growers
	Ethiopia	Ethiopia	India (R)	India (R)	India (A)	India (A)
1980	58.46		*	*	99.44	
1981	54.6	-6.6	*	*	84.29	-15.2
1982	70.04	28.3	*	*	79.88	-5.2
1983	46.09	-34.2	*	*	70.72	-11.5
1984	50.53	9.6	*	*	70.38	-0.5
1985	55.42	9.7	77.88		80.62	14.5
1986	75.76	36.7	71.65	-8.00	95.22	18.1
1987	44.77	-40.9	63.06	-11.99	77.75	-18.3
1988	59.89	33.8	63.63	0.90	88.93	14.4
1989	54.13	-9.6	46.27	-27.28	69.01	-22.4
1990	61.15	13.0	44.35	-4.15	66.75	-3.3
1991	68.25	11.6	40.65	-8.34	61.53	-7.8
1992	61.26	-10.2	39.77	-2.16	53.96	-12.3
1993	61.78	0.8	44.21	11.16	57.92	7.3
1994	112.4	81.9	56.46	27.71	78.41	35.4
1995	123.4	9.8	66.53	17.84	84.72	8.0
1996	73.01	-40.8	56.67	-14.82	78.32	-7.6
1997	94.32	29.2	76.3	34.64	130.18	66.2
1998	96.33	2.1	75.62	-0.89	99.47	-23.6
1999	67.74	-29.7	57.61	-23.82	67.44	-32.2
2000	56.42	-16.7	63.75	10.66	35.87	-46.8
2001	43.78	-22.4	43.82	-31.26	23.44	-34.7
2002	26.88	-38.6	39.61	-9.61	22.08	-5.8
2003	34.57	28.6	43.45	9.69	28.6	29.5

Year	Prices paid to coffee Arabica growers	Percentage growth in prices paid to coffee Arabica growers	Prices paid coffee Robusta growers	Percentage growth in prices paid to coffee Robusta growers	Prices paid to coffee Arabica growers	Percentage growth in prices paid to coffee Arabica growers
	Ethiopia	Ethiopia	India (R)	India (R)	India (A)	India (A)
2004	48.85	41.3	58.32	34.22	30.8	7.7
2005	64.23	31.5	96.53	65.52	52.42	70.2
2006	58.32	-9.2	95.86	-0.69	61.35	17.0
2007	69.83	19.7	108.03	12.70	79.38	29.4
2008	71.71	2.7	121.7	12.65	96.12	21.1
2009	77.06	7.5	136.89	12.48	73.13	-23.9
2010	85.46	10.9	77.95	-43.06	77.95	6.6

The trend of prices paid to coffee growers in India, Ethiopia (1980-2010)

Country	**Ethiopia**	**India**		World[6]
Coffee variety	Arabica	Arabica	Robusta	(Arabica, R)
Mean price paid to coffee growers from 1980-2010 (US Cent per Ib[7])	65.36	70.19	67.94	100.58
CV (%)	31.79	34.68	38.17	35.74
CAGR (% p.a.) from 1980-2010	0.13	0.98	0.98	-0.72
P-Value	0.65	0.01	0.012	0.03

Source: Compiled from ICO

NB: * denotes unavailable data for that particular period

a) *A -denotes Coffee Arabica, R denotes Coffee Robusta*

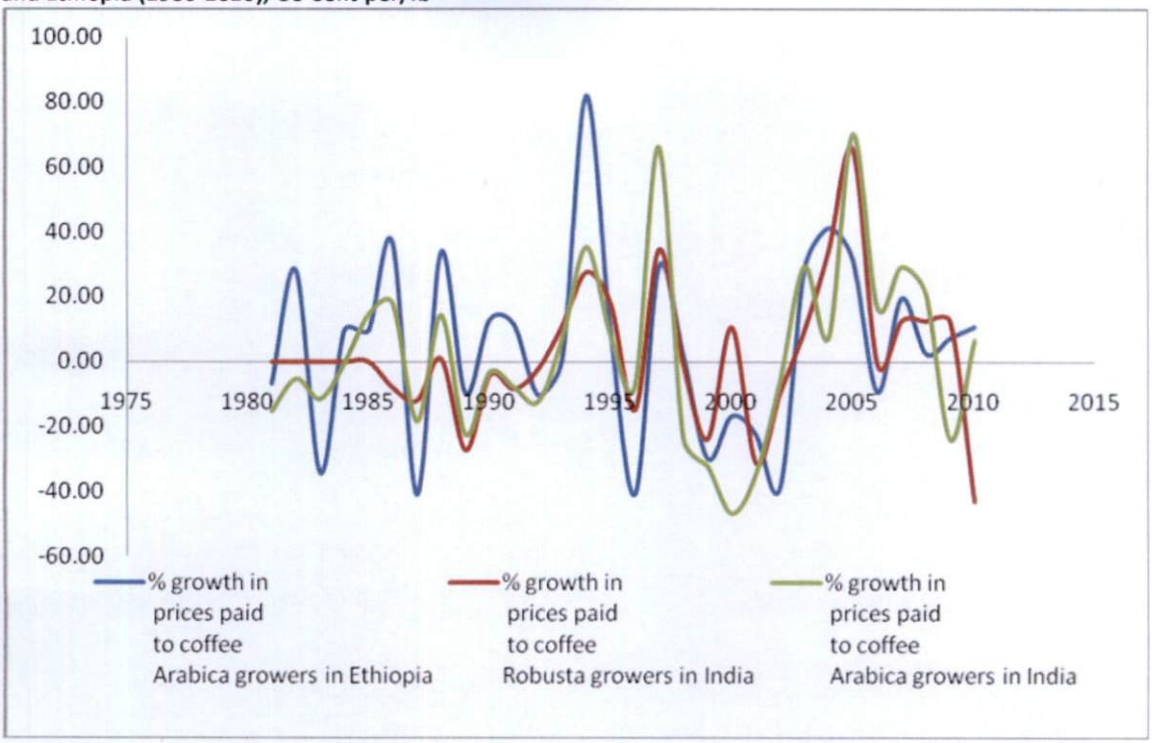
b) *The mean price paid to coffee Robusta growers in India calculated from 1985-2010 while, for coffee Arabica was from 1980-2010*

It was noted that the prices paid to Arabica coffee growers from 1980-2010 and the prices paid to Robusta coffee growers in India from 1985-2010 grew at 98 percent per annum. However, the model further detected that the year to year variation exhibited in the prices paid to coffee Robusta growers witnessed higher (38.17) than the variation exhibited in the prices paid coffee Arabica growers (34.68) for the study period.

[6] Refer Appendix 13 for the World prices paid to coffee growers, figures are the ICO composite price.

[7] *Ib is the pound or pound-mass (abbreviation: lb) is a unit of mass used in the imperial, United States customary and other systems of measurement, 1kilo gram has similar weight with 2.20462 Ib or pound.*

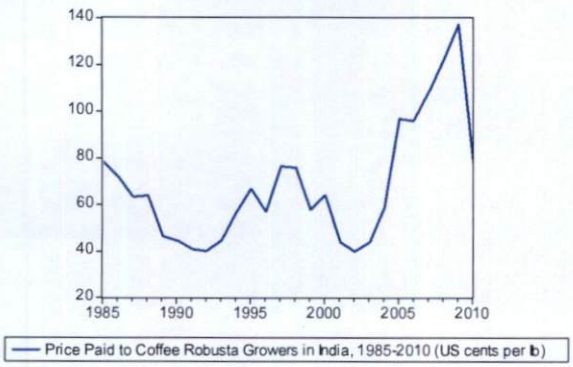
Figure 4.6: The percentage growth rate of prices paid to coffee Arabic and coffee Robusta growers in India and Ethiopia (1980-2010), US Cent per/lb



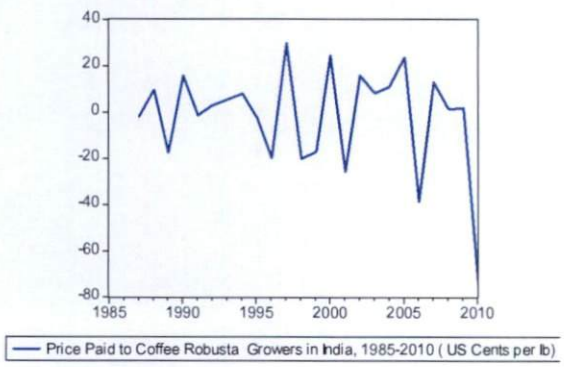
4.1.4.1. Trend in price paid to Robusta coffee growers in India (1985-2010)

In order to measure the strength of volatility shock exhibited on the price paid to coffee Arabica growers in India for the study period (1985-2010), the GARCH model was fitted to the time series data. However, before running the GARCH model the data were converted from non-stationary to stationary after second differencing the time series.

Figure 4.7: ADF results for the trends in price paid to coffee Robusta growers in India, 1985-2010 (US Cents per lb)



Before converting the time series to stationarity



After converting the time series to stationarity

Accordingly, after second difference, the graph shows the series have a constant mean and constant variance which implies that the second difference of the time series data of prices paid to coffee Robusta growers in India achieved stationary.

Moreover, the time series data of the prices paid to coffee Robusta growers in India from 1980-2010 tested against the existence of unit root problem in the time series using ADF-URT fitting the GARCH/ARCH model. Accordingly, the result was found consistent to reject the null hypothesis at critical value of -3.3 at 10 percent, -3.6 at 5 percent, and -4.5 at 1 percent given the condition that critical values are greater than the value of the test statistics -7.4 (See Appendix 9).

GARCH /ARCH result for the prices paid to coffee Robusta growers in India

Dependent Variable: D2PPGR

GARCH = C(1) + C(2)*RESID(-1)^2 + C(3)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
	Variance Equation			
C	-11.64173	24.15881	-0.481883	0.6299
RESID(-1)^2	-0.168913	0.330914	-0.510445	0.6097
GARCH(-1)	1.298873	0.117590	11.04580	0.0000

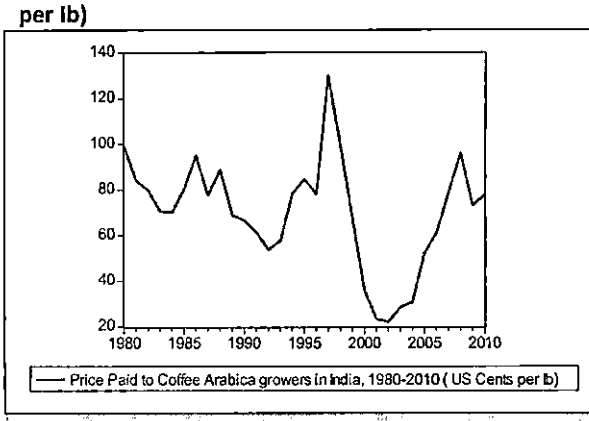
NB: PPGR denotes prices paid to coffee Robusta growers in India

The GARCH result indicates that there is significant long run persistence volatility (year to year variation) in the price paid to coffee Robusta growers in India. Accordingly, the sum of the ARCH and GARCH coefficients ($\alpha+\beta > 1$) is greater than one, which is -0.17 + 1.3=1.1, indicating that volatility shocks existing in the prices paid to coffee growers in India for the past three decades was persistent.

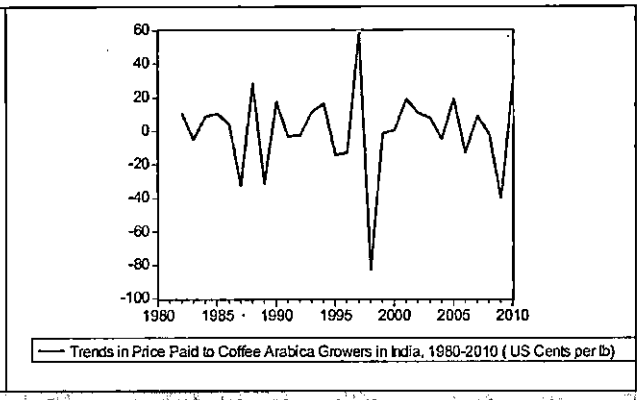
4.1.4.2. Trend in prices paid to Arabica coffee growers in India (1980-2010)

In order to measure the volatility of prices paid to coffee Arabica growers in India for the study period (1980-2010), GARCH model was fitted to the time series.

Figure 4.8: ADF results for the trend in prices paid to coffee Arabica growers in India, 1980-2010 (US Cents per lb)



Before converting the time series to stationarity



After converting the time series to stationarity

However, before running the GARCH model the data have been converted from non-stationary to stationary after second differencing the time series. Accordingly, after second difference of the time series, the graph shows that the series have a constant mean and constant variance which implies that its second difference achieved stationarity (Appendix 10).

The time series data of price paid to coffee Arabica growers in India from 1980-2010 were tested using ADF test against the existence of unit root problem in the series using ADF-URT before fitting the GARCH/ARCH model. Based on the ADF test statistics result, it was found consistent to reject the null hypothesis at critical value of -3.2 at 10 percent, -3.6 at 5 percent, and -4.4 at 1 percent given the condition that critical values are greater than the value of the test statistics -9.0 (Appendix 10).

GARCH / ARCH result for the prices paid to coffee Arabica growers in India 1980-2010

Dependent Variable: D2PPGA

GARCH = C(2) + C(3)*RESID(-1)^2 + C(4)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
@SQRT(GARCH)	0.104984	0.131325	0.799421	0.4240
	Variance Equation			
C	296.6544	98.81120	3.002234	0.0027
RESID(-1)^2	0.588428	0.399499	1.472916	0.1408
GARCH(-1)	-0.073021	0.056271	-1.297655	0.1944

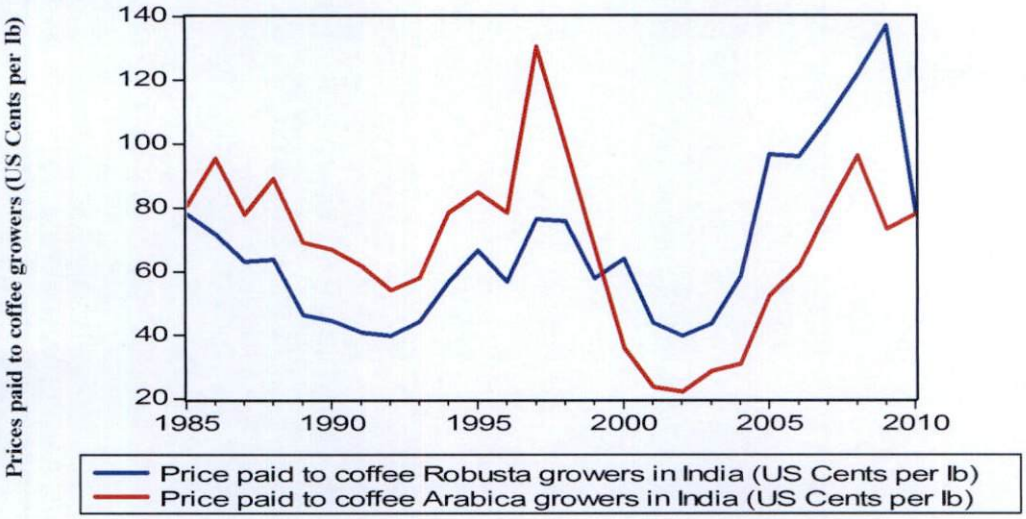
NB: PPGA denotes prices paid to coffee Arabica growers in India

The ADF-URT signalled the non-existence of unit root problem against the time series for the prices paid to coffee Arabica growers in India from 1980-2010. Accordingly, GARCH (1, 1) model was fitted to trace the un-captured non-linear ARCH effects present in the series. Accordingly, the sum of the ARCH and GARCH coefficients ($\alpha+\beta$ <1) is less than one, which is 0.58 + -0.07= 0.51, indicating that volatility shocks existed in the prices paid to coffee Arabica growers in India for the past three decades was found not persistent.

4.1.5. The trend in market integration between prices paid to coffee Arabica and coffee Robusta growers in India (1985-2010)

The long run relationship (market efficiency) between the prices paid to coffee Arabica growers and the prices paid to coffee Robusta growers in India was estimated using the time series data from the year 1985 to 2010. Accordingly, Johansen cointegration test was employed.

Figure 4.9: Cointegration between the prices paid to coffee Arabica growers and coffee Robusta growers (1985-2010)



Label data (original data) of the two variables were taken in to consideration to run the model and the results were generated with specification in allowing the model for linear deterministic trend in data.

Table 4.5:Johansen Co-integration result on the prices paid to coffee Arabica growers against prices paid to Coffee Robusta growers in India from 1980-2010

Sample (adjusted): 1987-2010
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None	0.261578	8.902266	15.49471	0.3745
At most 1	0.065448	1.624520	3.841466	0.2025

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigen value	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None	0.261578	7.277746	14.26460	0.4568
At most 1	0.065448	1.624520	3.841466	0.2025

NB: Refer Appendix 11 for the details of the test result

Trace statistic test indicated that the model fail to reject the null hypothesis since the P-value (37 percent) is greater than 5 percent. At the same time Max-Eigen value test also failed to reject the null hypothesis, since the P-vale (45 percent) is greater than 5 percent. Therefore, the two variables are not co-integrated since consistent result was detected by both trace test and Max-Eigen value test, to accept the null hypothesis, and affirmed that there is no co-integration between the prices paid to Arabica coffee grower and prices paid to Robusta coffee growers in India for the past two and half decades (1985-2010). This indicates that the coffee market was found to be not efficient to handle the two variables (prices paid to coffee Arabica growers and prices paid to coffee Robusta growers) together in the long run as indicated during period 1985-2010. However, this conclusion is limited to the assumption that any associated cost can be reflected on the prices paid to the coffee growers. Whereas, operational costs that might contribute the efficiency of the market across the coffee market supply chain were not taken in to account. The two variables are felt to have long run relationship which might be due to the prices of coffee Arabica which is always higher than the prices of coffee Robusta throughout the study period.

4.1.6. Trends in the prices paid to coffee growers in Ethiopia (1980-2010)

The trend of prices paid to coffee Arabica growers in Ethiopia witnessed a mean of 57.35 US Cents per Ib from 1980-1990 and slightly increased to 69.78 US Cents per Ib from 1991-2010. However, the prices paid to coffee Arabica growers in Ethiopia from 1980-2010 grew at 12 percent with coefficient variation of 31.79 percent. Furthermore, prices paid to coffee Arabica growers has witnessed a slight increment from 58.46 US Cent per Ib in the year 1980

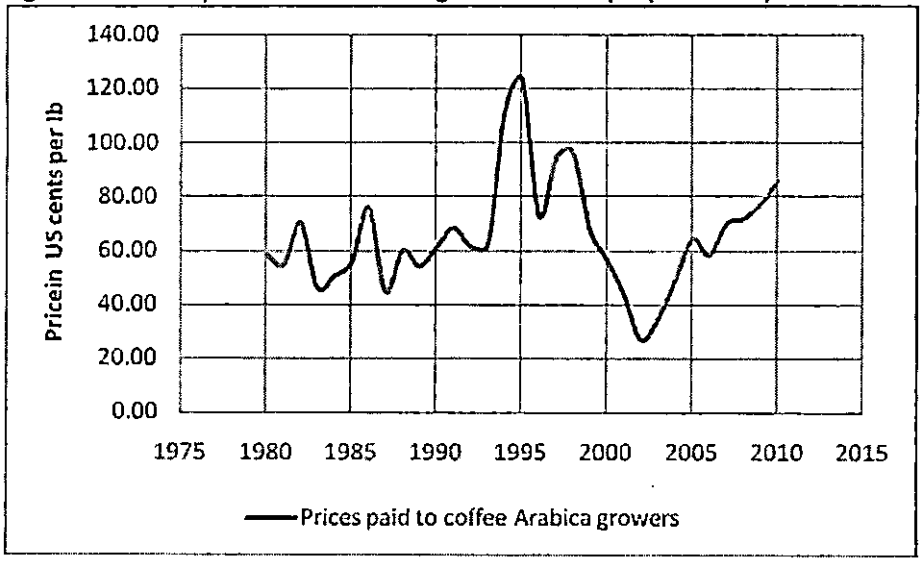
to 61.15 US Cent per Ib, 56.42 US Cent per Ib and 85.46 for the year 1990, 2000 and 2010, respectively.

Coffee growers in Ethiopia recorded the lowest prices between the year 2000 and 2003 while the highest was in the year 1995. The fall in the prices paid to coffee growers in the aforementioned period was attributed due to the World coffee crises. Although growers are generally paid in local currency, these prices are given in US cents/lb, so some of the variance could be explained by fluctuating exchange rates (ICO. 2014).

The average price paid to coffee Arabica growers in Ethiopia for the past three decades accounted for 65.36 US cents per Ib (see Table 4.5).

There are other factors that attributed for the year to year variation exhibited in the prices paid to coffee growers in Ethiopia. In 1999-2003, the increasing production of cheaper coffee Robusta bean in Vietnam and Brazil, the world coffee crises in which world coffee prices fall at the lowest level in 30 years having fallen by 50 percent in three years and the global supply is estimated to be about 8 percent above the demand and has accordingly depressed the world coffee price (Takamasa A. 2001). On the other hand, in 1994 the two frosts that hit Brazilian coffee resulted in decreases supply of coffee in world market which led to higher prices for coffee.

Figure 4.10: Prices paid to coffee Arabica growers in Ethiopia (1980-2010)

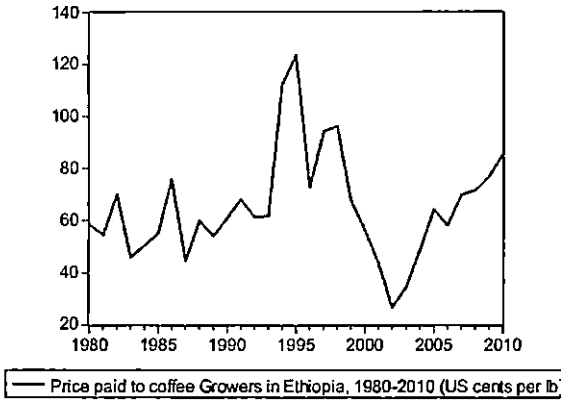


Moreover, the establishment of the Oromia Coffee Farmers Cooperative Union (OCFCU) in 1999 which helped small scale farmers taking advantage of the Fair Trade coffee market was a viable alternative trade strategy to come out of the difficult coffee price crises. The Sidama

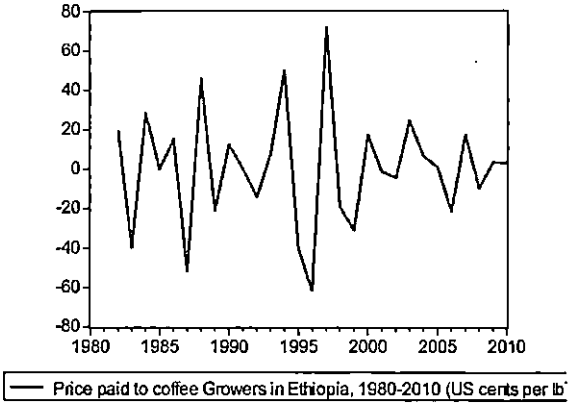
Coffee Farmers Cooperative Union (SCFCU) formed in 2001 as a processing, marketing, and exporting union for 47 primary cooperatives located in Ethiopia's Sidama Zone, in Southern Ethiopia, representing some 85,000 small-scale farmers was an excellent example of what is possible through farmers organization while connected to Fair Trade coffee roasters.

More to this, coffee growers and coffee exporters through the Ethiopian Fine Coffee support received from Ethiopian Coffee Exporters Association (ECEA) to participate in different agri-business expo.

Figure 4.11: ADF results for the trends in prices paid to coffee growers in Ethiopia, 1980-2010 (US cents per lb)



Before converting the time series to stationarity



After converting the time series to stationarity

In order to measure the strength of volatility shock exhibited in the prices paid to coffee growers in Ethiopia for the study period (1980-2010) GARCH model was fitted to the time series. However, before running the GARCH model, the level data were converted to stationary, after second differencing the time series (See figure 4.11). Accordingly, after second difference the graph shows that the series have a constant mean and constant variance, which implies that its second difference achieved stationarity.

The time series data of prices paid to coffee growers in Ethiopia from 1980-2010 were tested against the existence of unit root problem in the series using ADF-URT. The result which was detected by ADF-URT statistics found consistent to reject the null hypothesis at critical value of -3.23 at 10 percent, -3.6 at 5 percent, and -4.37 at 1 percent given the condition that critical values are greater than the value of the test statistics -8.68 (see Appendix 12).

GARCH /ARCH result on prices paid to coffee growers in Ethiopia 1980-2010

Dependent Variable: Prices paid to coffee Arabica growers

GARCH = C(2) + C(3)*RESID(-1)^2 + C(4)*GARCH(-1)

	Coefficient	Std. Error	z-Statistic	Prob.
@SQRT(GARCH)	2.407353	0.419897	5.733194	0.0000
	Variance Equation			
C	-78.96500	76.52120	-1.031936	0.3021
RESID(-1)^2	-0.082372	0.071023	-1.159788	0.2461
GARCH(-1)	1.240323	0.209365	5.924215	0.0000

Since the ADF-URT signalled the non-existence of unit root problem against the time series data of the prices paid to coffee growers in Ethiopia from 1980-2010, GARCH (1, 1) model was fitted to trace the un-captured non-linear ARCH effects present in the series. The ARCH coefficient of the GARCH (1, 1), α was found to be negative though it is not statistically significant. The implication of the result is the non-existence of significant short run volatility persistence (i.e. there is no significant ARCH effects in the series). The estimate of β, the GARCH coefficient, which represents the contribution of shocks to long run volatility persistence, has a positive and statistically significant value. This indicates that there is significant long run persistence of volatility (variation) in the prices paid to coffee growers in Ethiopia. Accordingly, the sum of the ARCH and GARCH coefficients ($\alpha+\beta > 1$) is greater than one, which is (-0.08 + 1.24=1.15). Thus, the volatility shocks exhibited in the year to year variation of the prices paid to coffee growers in Ethiopia for the past three decades (1980-2010) was found with significant long run persistence of volatility (variation) as per the result detected by GARCH-ARCH.

Moreover, the average prices paid to Arabica coffee growers in India was better than prices paid to Ethiopian coffee Arabica growers with 4.83 US Cents per Ib for the study periods. This might be due to the existence of difference in the operational cost as well as living cost associated with coffee growers in Ethiopia and India. Additionally, proximity of Indian coffee exporter to major ports will reduce operational cost for exporters and ultimately increase in the income across the market supply chain, thus, reflected in prices paid to coffee growers in the country. However, Ethiopia is a land locked country, thus exporters have to born high transportation cost, which might result in reduction in the prices paid to coffee growers.

4.1.7. The trend in monetary value of coffee exports from India and Ethiopia (1995-2010)

The trend in the monetary value realized from coffee in India witnessed negative incremental growth of -28 percent from 1995-2010. Similarly, the percentage share of coffee from products exported by India from 1995-2010 witnessed negative and significant incremental growth of -636 percent. While, Ethiopia secured positive incremental growth of 230 percent in its monetary value realized from coffee. However, Ethiopia accounted significant negative incremental growth of -230 percent from the year 1995-2010 in the percentage share to the total products exported by Ethiopia (Table 4.6).

Table 4.6: The share of coffee from the total products exported by India and Ethiopia 1995-2010

(in million US Dollar

	Coffee export from India		Coffee export from Ethiopia	
year	Value in Million US Dollar	Percentage share of coffee from products exported by India	Value in Million US Dollar	Percentage share of coffee from products exported by Ethiopia
1995	419.07	1.40	303.66	53.50
1996	405.54	1.18	257.98	58.11
1997	371.95	1.02	382.35	56.45
1998	386.19	1.12	413.01	59.69
1999	309.33	0.89	264.76	51.97
2000	301.15	0.71	268.67	45.86
2001	179.63	0.40	165.49	32.15
2002	152.41	0.31	168.12	33.48
2003	163.13	0.27	198.75	30.57
2004	199.03	0.25	289.41	37.97
2005	219.87	0.22	568.90	43.22
2006	309.39	0.25	650.78	43.56
2007	349.20	0.21	451.45	29.31
2008	429.32	0.20	564.59	30.02
2009	305.60	0.18	415.66	22.41
2010	413.90703	0.20	698.46	28.24
Mean	307.174	0.006	378.878	0.410
Std	96.970	0.004	169.372	0.121
CV%	31.568	77.780	44.704	29.58
CAGR%	-0.280	-6.361	2.305	-2.301
Pvalue	0.751	0.000	0.030	0.000

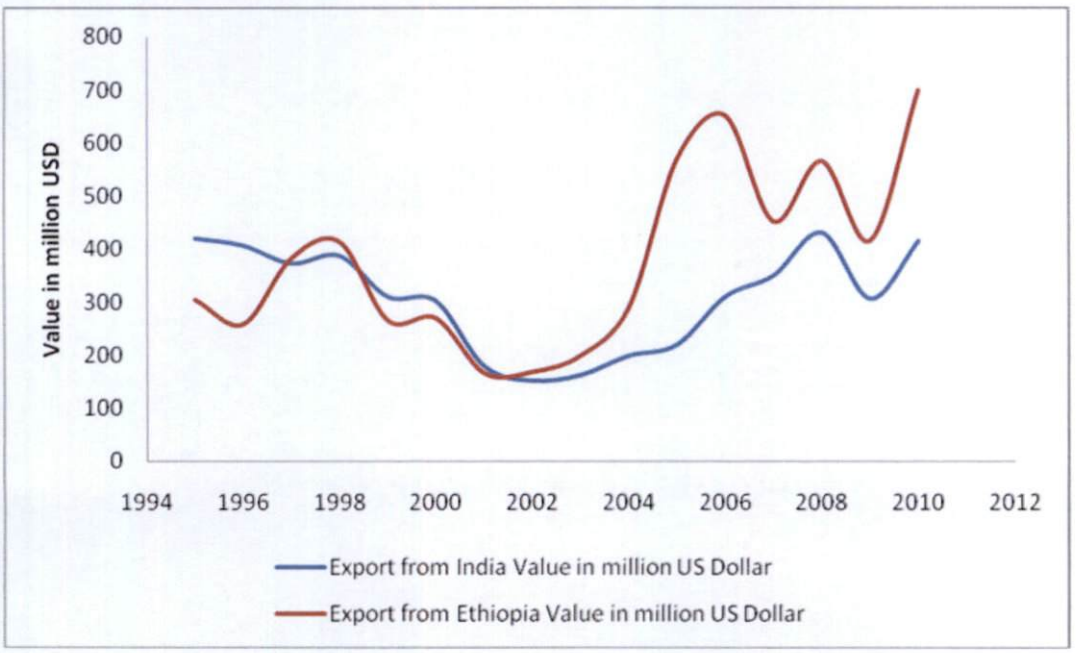
Source: Compiled from the Observatory of Economic Complexity.2014.

NB: Data form 1980-1994 were excluded due to inconsistency of data available in different sources, which might adversely affect the reliability of the result

Trends in the monetary value realized in export of coffee from India decreased from USD 419 million in 1995 to USD 152 million in 2002. Later the monetary value realized from the export of coffee increased and reached a level of 429 million USD in 2008 and decreased to USD 413 million tons in 2010. Ethiopia followed similar pattern in trend in the monetary value realized in the export of coffee despite their difference in growth rate.

Ethiopia accounted USD 303 million in 1995 and decreased to USD 168 million in 2002. Later the monetary value realised from the export of coffee increased and reached a level of USD 415 million in 2008 and jumped to and reached a level of USD 698 million in the year 2010 (see figure 4.12).

Figure 4.12: Monetary value realised from coffee in India and Ethiopia from 1995-2010 (in million US Dollar)



The increase or decrease in the monetary value realised from coffee export both in India and Ethiopia was mainly dependent on the trend in total volume of coffee exported as well as quantity production from the respective country. Additionally, the fell of the ICO Composite Indicator price below 50 cents/lb during the years 2001-2005 shockingly low producer prices, marked as the coffee crisis and the World economic crisis of the 2008 and in subsequent years, where local currency movements in coffee producing countries have gone against exporters with their local currency appreciating against the USD (International Trade Centre .2011), subjected the Indian and Ethiopian coffee sector to experience a decreasing trend in the monetary value of coffee exported.

4.1.9. The trend in composition of coffee exports from India and Ethiopia

Export of coffee from India and Ethiopia takes different forms or compositions[8]. In the present study, composition of coffee implies, the form of coffee exported from India and Ethiopia Viz., green coffee Arabica, green coffee Robusta, roasted coffee and soluble coffee. The trend in exports of green coffee Arabica, green coffee Robusta, roasted coffee and soluble coffee in India and Ethiopia were assessed.

Table 4.7: Composition of coffee exports from India and Ethiopia, (2006-2011) (00 tons)

Calendar Year	Green coffee (Arabica)		Green coffee (Robusta)	Roasted coffee		Soluble coffee	
	India	Ethiopia	India	India	Ethiopia	India	Ethiopia
2006	59727	1662	130224	181.5	0	24563.8	0
2007	42114	1684	106865	415.6	0	49769.7	0
2008	48919	1121	107207	257.6	11.6	46215.8	0
2009	29641	1742	94234	262.9	1.3	56255.3	0
2010	50580	1813	152276	252.2	4.2	74741.5	0
2011	54727	169920	194425	284.3	2.3	100936.3	0
CAGR	-0.48	0.96	3.71	0.95	-14.79	11.09	-
Mean in 00 tons	*47618.1*	1620.2	*130872.1*	*275.6833*	*3.240702*	*58747.08*	-
STD	10593.37	250.43	37352.99	76.87	4.40	26260.55	-
CV	22.24	15.45	28.54	27.88	136.06	44.70	-

Source: ICO

NB:

- Data for Roasted and Soluble coffee exports was not available for the entire study period, however, exports of green coffee (Arabica and Robusta) was briefly explained earlier in Table number 4.3
- CAGR and CV results for roasted coffee exports from Ethiopia were calculated only from the year 2008-2010 due to unavailability of data

4.1.9.1. The trend in composition of coffee exports from India

The result generated from CAGR model indicates that recently, from 2006-2011 India experienced a negative incremental growth in the exports of green coffee Arabica with -48 percent while, exports of coffee Robusta grew at 371 percent. This might be due to the shift noted from green coffee to value added coffee. At the same time, there was a positive incremental growth in the exports of value added products of coffee from India, mainly roasted coffee and soluble coffee accounting annual growth of 95 percent and 111 percent,

[8] Composition of coffee in the present study indicates the forms of coffee Viz., green coffee Arabica, green coffee Robusta, roasted coffee and soluble coffee which exported from India or Ethiopia.

respectively with coefficient variation of 28 percent and 45 percent, respectively. This indicates that in the recent time, there is a slight shift from exports of green coffee to value added products of coffee export in India. This slight shift from exports of green coffee to value added products of coffee might be due to the recent expansion of demand for soluble coffee, which is among the most profitable parts of the coffee business, has enabled the industry to capture increased value from less expensive raw materials, such as Robusta coffees (Bryan L. *et al.*, 2004)

Recently, the Government of India (2012) has introduced a marketing strategy for providing financial incentives as a measure to promote Indian brand in the international market and sale of coffee in important far off destinations (markets where traditionally Indian coffee was absent). This marketing scheme come into action by providing incentives of Rs. 1/kg for export of high value coffee to the far off destinations viz., USA, Canada, Japan, Australia and New Zealand. Similarly, the scheme is providing incentives of Rs. 2/kg for export of value added coffee in retail packs of less than 500 grams as India brand. This will help the sector to diversify export of green coffee to value added products of coffee.

However, trade policy concerns in global markets tend particularly the impact of tariff escalation on the coffee sectors of developing countries, as tariffs on processed coffee discourage the development of processing industries at source. The European Union, for instance, applies an average duty of 9 percent for processed coffees, while countries such as India and Ghana have duties on instant coffee of 35 and 20 percent respectively (FAO-2006).

4.1.9.2. The trend in composition of coffee exports from Ethiopia

The growth in the composition of coffee exports from Ethiopia indicates that there is a positive incremental growth in the exports of green coffee Arabica at 96 percent per annum with a coefficient variation of 15.45 percent from 2006-2010. However, exports of value added products of coffee mainly roasted coffee exports witnessed a negative incremental growth rate of -148 percent from 2006-2011 with a year to year variation of 136 percent coefficient of variation. The trend indicates that, the Ethiopian coffee industry is mainly unprocessed coffee export oriented. This might be due to the high cost of operation, high cost of processing plants, less technical knowhow of coffee exporters about value added products of coffee, unavailability of consistent demand and difficulty to compete with coffee exporters from developed countries as it was mentioned by Ethiopian coffee exporters. Despite the negative incremental growth rate noted in the export of soluble coffee from 2008-2011,

coffee exports from Ethiopia witnessed a slight increase from exporting of green coffee to exporting of value added product of coffee. However, there is a scope for exporters to diversify the export into value added products of coffee viz., roasted coffee and soluble coffee (Table 4.7).

Conclusively, the recent trend in the composition of coffee export indicated that India witnessed a negative incremental growth in green coffee export whereas; Ethiopia witnessed a positive incremental growth. On the other hand India witnessed a positive incremental growth in the exports of value added products of coffee whereas; Ethiopia witnessed a negative incremental growth.

4.1.10. Coffee export marketing strategies for India and Ethiopia based on trends in direction of coffee exports

To examine the loyalty, market power and market retention potential of major Indian and Ethiopian coffee export market targets the market stability and concentration level analysis, transitional probability of the Markov chain analysis, and Herfindahl–Hirschman Index (HHI) were fitted against the time series data.

4.1.10.1. Coffee export market stability and concentration level analysis of Indian major coffee export markets

Coffee export market stability and concentration level analysis were employed on the major coffee export market destinations of India.

Table 4.8: Exports of all forms of coffee from India to the major export market destinations (Unit in million tons)

Year	Country of Indian coffee export destination						
	Russian Federation	Italy	Germany	USA	Japan	Others	Total Export
1980	0.028	0.001	0.003	0.019	0.006	0.023	0.081
1981	0.029	0.002	0.007	0.025	0.006	0.023	0.092
1982	0.034	0.003	0.007	0.014	0.010	0.018	0.086
1983	0.032	0.004	0.006	0.009	0.005	0.015	0.070
1984	0.022	0.003	0.006	0.008	0.011	0.016	0.065
1985	0.038	0.004	0.004	0.012	0.012	0.027	0.096
1986	0.032	0.003	0.005	0.016	0.003	0.030	0.089
1987	0.033	0.005	0.007	0.014	0.006	0.028	0.094
1988	0.043	0.007	0.006	0.007	0.002	0.025	0.089
1989	0.058	0.008	0.010	0.013	0.004	0.030	0.123

Year	Country of Indian coffee export destination						
	Russian Federation	Italy	Germany	USA	Japan	Others	Total Export
1990	0.065	0.007	0.011	0.006	0.000	0.030	0.119
1991	0.047	0.009	0.011	0.008	0.001	0.028	0.104
1992	0.022	0.014	0.015	0.008	0.005	0.044	0.109
1993	0.015	0.016	0.029	0.010	0.004	0.051	0.126
1994	0.017	0.027	0.032	0.013	0.008	0.054	0.150
1995	0.039	0.021	0.011	0.018	0.009	0.051	0.148
1996	0.050	0.027	0.020	0.018	0.009	0.064	0.187
1997	0.032	0.026	0.024	0.013	0.006	0.057	0.158
1998	0.033	0.032	0.032	0.020	0.008	0.085	0.209
1999	0.030	0.037	0.029	0.010	0.005	0.107	0.217
2000	0.042	0.039	0.032	0.022	0.004	0.114	0.254
2001	0.040	0.041	0.030	0.010	0.003	0.100	0.224
2002	0.039	0.045	0.028	0.004	0.006	0.092	0.213
2003	0.034	0.051	0.022	0.003	0.004	0.109	0.222
2004	0.031	0.051	0.022	0.006	0.005	0.103	0.219
2005	0.009	0.052	0.015	0.003	0.004	0.087	0.170

The trend in exports of all forms of coffee from India to major export market destinations-Calendar Years 1980 to 2005 (Unit in million tons)

Export destination	Russian Federation	Italy	Germany	USA	Japan	Others	Total Export
CAGR	-0.32	6.68	3.65	-1.59	-0.27	3.60	2.18
P Value	0.50	0.000	0.000	0.01	0.76	0.000	0.000
total Export volume (in million tons) 1980-2005	0.89 (23.99)	0.53 (14.40)	0.42 (11.37)	0.30 (8.30)	0.14 (3.95)	0.14 (37.98)	2.42 (100)
CAGR	-0.32	6.68	3.65	-1.59	-0.27	3.60	2.18

Source: Figures are the Researcher's calculation based on data collected from ICO

NB: -Coffee exports figures to USSR and Russian Federation were merged for the years 1980-1990

- Figure in parenthesis are percentage share of the target market

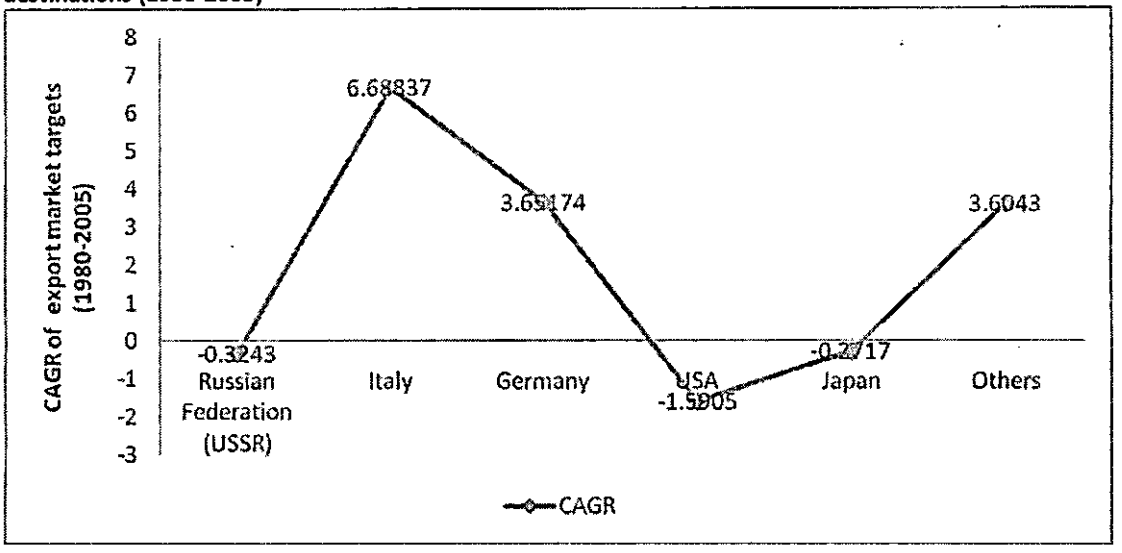
The major importing countries of Indian coffee were Russian Federation[9] (including the former USSR), Italy, Germany, USA, Japan and Others.

It is evident from figure 4.13 that the percentage market share of Indian coffee in major export market destinations for the past twenty five years (1980-2005) was dominated by Russian Federation (USSR) with a market share of 23.99 percent followed by Italy (14.40

[9] Coffee exports to Russian Federation in Table 4.8 includes coffee exports to USSR from the year 1980-1990

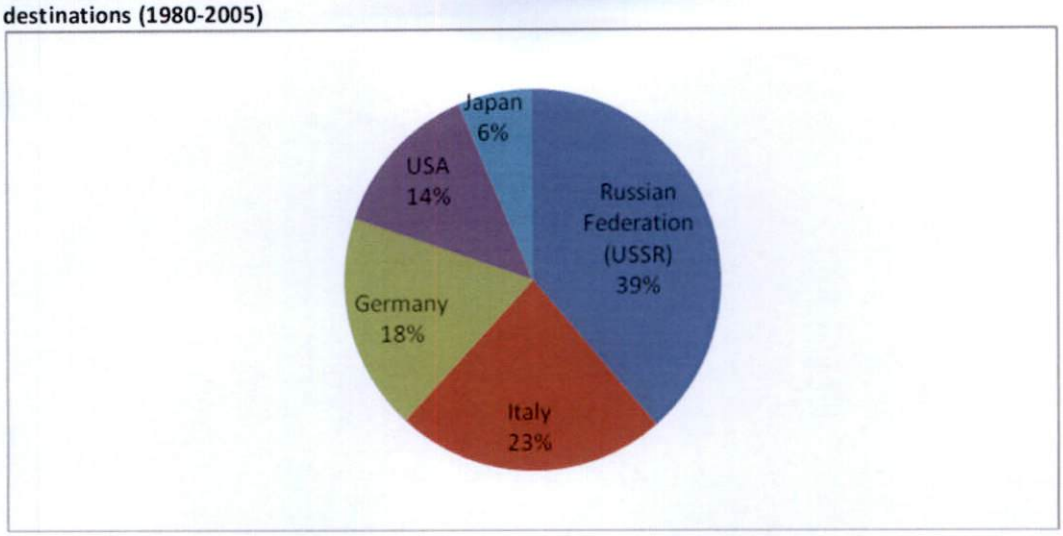
percent), Germany (11.37 percent), USA (8.30 percent), Japan (3.95 percent) and the remaining 37.98 percent of the market share has been shared by other countries.

Figure 4.13: The CAGR of the percentage market share of Indian coffee in the major coffee export destinations (1980-2005)



Coffee exports to Russian Federation (including the former USSR), USA and Japan registered a negative incremental growth of -0.32 percent, -1.60 percent and -0.27 percent, respectively. Whereas, coffee exports to Italy, Germany and Other Indian coffee importing countries witnessed a positive incremental growth of 6.69 percent, 3.65 percent, and 3.60 percent respectively (See Table 4.8). The growth rate noted at Italy, Germany, USA and Other export target markets of India from the year 1980-2005 was found statistically significant.

Figure 4.14: The compound annual average for the percentage market share of Indian coffee to major export destinations (1980-2005)



Russian Federation (USSR) witnessed the highest market share for the period 1980-2015. This might be due to the positive impact of Rupee-Rouble trade agreement between the two countries. As India and Russia have a return of trading in each other's national currencies, the rupee-rouble trade arrangement which may weaken the role of the US dollar in the two countries, made trade easy between them. Russia is the major export destination for Indian coffee export. However, the recent sharp volatility witnessed in rouble has impacted the Indian exporters to transact in dollar and ultimately the importer in Russia will have to pay a large amount of rouble to get that much of dollar. Thus, coffee exports from India to the Russian Federation market experienced a negative incremental growth.

4.1.10.2. Market concentration level of the major Indian coffee export target markets (Herfindahl–Hirschman Index (HHI) Analysis)

Coffee export market instability and concentration level analysis were computed on the major coffee export market destinations of India and Ethiopia. Furthermore, Markov chain analysis model and Herfindahl–Hirschman Index (HHI) were fitted to examine the major coffee export target markets of India and Ethiopian coffee exports.

Market power refers to conditions where the providers of a service can consistently charge prices above those that would be established by a competitive market (Fernando Alvarado [n.d]). Market Power is the ability of a firm or group of firms within a market to profitably charge prices above the competitive level for a sustained period of time (Philip Nelson [n.d]). One of the most common means for measuring market power is the Herfindahl-Hirschman Index, which was fitted to examine the market concentration level (competition and market power) of major Indian coffee importing countries/ Indian coffee export market destinations.

The HHI index is defined as follows:

$$HHI = \sum_{i=1}^{N} Si^2$$

Where, the summation is over all N participants in the market and s refers to the market share of each. Accordingly, the model detected that coffee exports from India to Italy, Germany, USA and Japan market were found un-concentrated market with HHI value of 1440, 1137, 830, and 395, respectively.

Table .9: HHI result of market concentration level of coffee exports from India to major export market destination (Calendar Years 1980 to 2005) (Units in tons)

Year	Country of destination						
	Russian Federation	Italy	Germany	USA	Japan	Others	Total Export
Total export from 1980-2005 in tons	891200	534597	4224238	3083255	146758	1410775	3714079
HHI Value	2399	1440	1137	830	395	3798	10, 000

Figures are author's calculation based on the data collected from ICO
NB: Coffee exports figures to USSR and Russian Federation were merged for the years 1980-1990)

Since their HHI values lay below 1500, these four Indian coffee export market destinations were found not highly competitive markets for Indian exporters. The market concentration level of Indian coffee export to Russian Federation accounted for HHI value of 2399 indicates, moderate concentration of the export destination. Others accounted for HHI value of 3798 indicating a high concentration.

HHI value implies that the closer a market is to being a monopoly, thus, the higher the market's concentration (and the lower its competition). There is nearly a perfect competition in the coffee exports to Italy, Germany, USA and Japan markets; while, Russian Federation and others export market destinations (countries) were found monopoly market destinations for Indian coffee exporters (Table 4.9). Furthermore, it can be inferred from the result that even though there are many coffee exporting countries to Russian Federation, products are differentiated (might be quality, brand image., etc) and hence, are not perfect substitute for Indian coffee. Such kind of market has an economic implication that neither Indian coffee exporters nor Russian Federation (Indian coffee importers) has complete market information regarding market demand and supply (Hischay, M. 2000). Additionally, since the target market is imperfect competition (monopolistic competition), it implies that Indian coffee

exporters have a degree of control over the price due to existing few barriers to entry and exit (Gan J., *et al.*, 2003).

4.1.10.2. Coffee export market instability and concentration analysis of major Ethiopian coffee export markets

Table 4.10: Exports of all forms of coffee from Ethiopia to major export destinations (Unit in million tons)

	Country of Ethiopian coffee export destination						
Year	Germany	Japan	USA	Saudi Arabia	France	Others	Total Export
1980	0.008	0.006	0.022	0.007	0.007	0.025	0.075
1981	0.013	0.008	0.033	0.009	0.009	0.015	0.086
1982	0.019	0.008	0.036	0.005	0.007	0.010	0.084
1983	0.025	0.008	0.029	0.005	0.011	0.015	0.093
1984	0.023	0.007	0.026	0.004	0.006	0.022	0.087
1985	0.020	0.007	0.010	0.002	0.003	0.025	0.068
1986	0.029	0.006	0.015	0.003	0.003	0.019	0.075
1987	0.019	0.009	0.026	0.004	0.003	0.012	0.074
1988	0.028	0.012	0.010	0.004	0.004	0.027	0.084
1989	0.031	0.013	0.025	0.004	0.006	0.023	0.102
1990	0.021	0.012	0.013	0.006	0.004	0.010	0.064
1991	0.019	0.013	0.002	0.004	0.003	0.009	0.050
1992	0.006	0.017	0.001	0.011	0.003	0.006	0.044
1993	0.020	0.018	0.011	0.006	0.004	0.011	0.070
1994	0.038	0.018	0.012	0.006	0.006	0.009	0.089
1995	0.033	0.015	0.006	0.009	0.005	0.010	0.077
1996	0.051	0.020	0.009	0.012	0.006	0.013	0.110
1997	0.037	0.019	0.020	0.012	0.005	0.027	0.119
1998	0.036	0.022	0.010	0.015	0.007	0.026	0.115
1999	0.031	0.025	0.005	0.018	0.009	0.023	0.109
2000	0.041	0.026	0.005	0.015	0.007	0.025	0.119
2001	0.010	0.024	0.004	0.017	0.008	0.018	0.083
2002	0.033	0.034	0.004	0.018	0.009	0.026	0.123
2003	0.041	0.031	0.005	0.015	0.008	0.033	0.134
2004	0.041	0.038	0.007	0.018	0.009	0.037	0.149
2005	0.050	0.030	0.010	0.015	0.007	0.033	0.146

Exports of all forms of coffee from Ethiopia to major export market destinations, Calendar years 1980 to 2005 (Unit in million tons)

Country	Germany	Japan	USA	Saudi Arabia	France	Others	Total
Total volume of exports (1980-2005) in million tons	0.72	0.44	0.35	0.24	0.15	0.50	2.40
	(29.73)	(18.25)	(14.66)	(9.96)	(6.51)	(20.85)	(100)
CAGR	1.69	3.18	-2.99	2.95	0.67	0.99	1.01
P Value	0.003	0.000	0.001	0.000	0.146	0.079	0.001

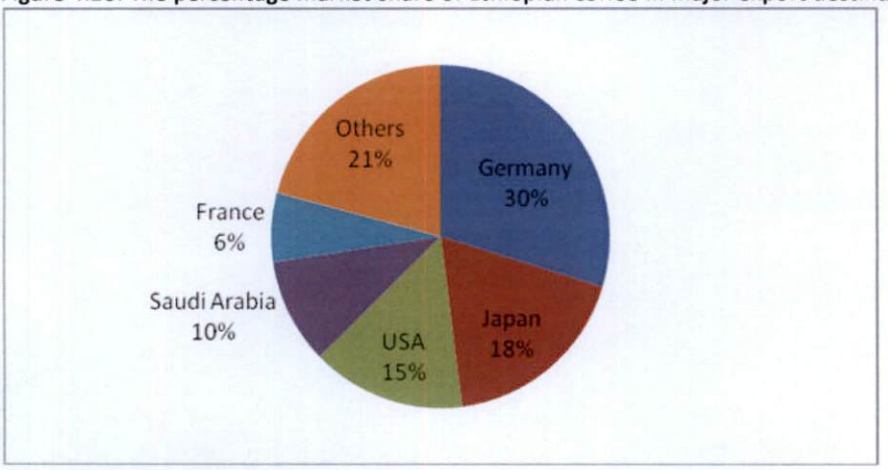
Source: Compiled from ICO,

NB: Figures in the table are presented after making further analysis by the researcher
Figures in parenthesis indicates the total percentage share of the target market

The major importing countries of Ethiopian coffee from the year 1980 to 2005 were Germany with a market share of 29.73 percent followed by Japan (18.25 percent), USA (14.66 percent), Saudi Arabia (9.96 percent), France (6.51 percent) and Other exporting countries accounted for 20.85 percent (Table 4.10).

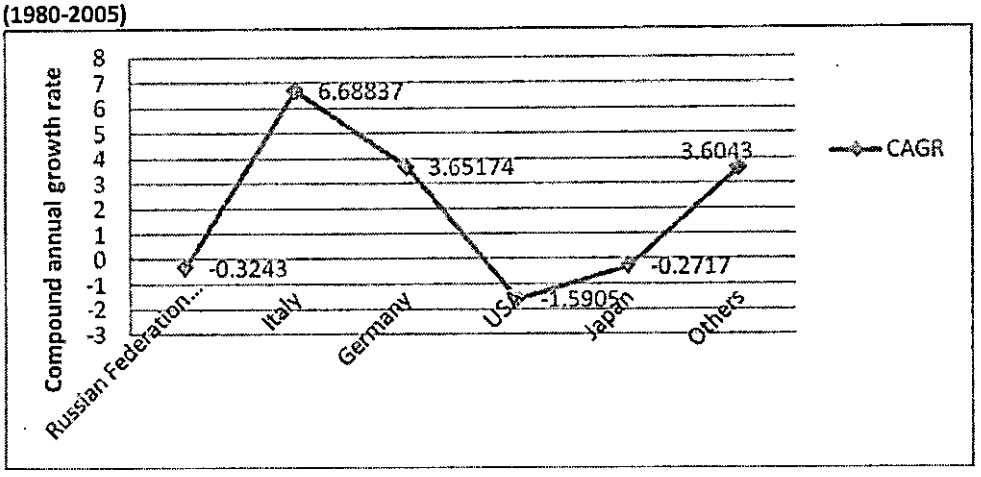
With the exception of coffee exports to USA, exports from Ethiopia to Germany, Japan, Saudi Arabia, France and others major targets of Ethiopian coffee witnessed a positive incremental growth at compound annual growth rate of 169 percent, 318 percent, 296 percent, 67 percent and 99 percent, respectively from 1980-2005 (Table 4.10).

Figure 4.20: The percentage market share of Ethiopian coffee in major export destinations (1980-2005)



Furthermore, coffee export from Ethiopia to Germany, Japan and Saudi Arabia witnessed appositive and significant incremental growth from 1980-2005. Whereas, coffee exports to France and Other Ethiopian coffee importing countries registered a positive incremental growth however, the growth noted was not significant (Table 4.10).

Figure 4.21:The CAGR of the percentage market share of Ethiopian coffee in major export destinations (1980-2005)



However, export to USA market grew at -2.93 percent. Conclusively, the volume of coffee exports from Ethiopia to all export market destinations grew at 1.02 percent annually from the year 1980-2005 (Table 4.10).

4.1.10.3. Market concentration level of the major Ethiopian coffee export destinations (Herfindahl–Hirschman Index Analysis)

HHI model was fitted to examine the market concentration level (competition and market power of Ethiopian coffee importing countries) of major Ethiopian coffee export target markets. Accordingly, HHI detected that coffee export to France, Saudi Arabia and USA markets found an un-concentrated market with HHI value of 651, 996 and 1466, respectively. Since their HHI values lay below 1500, these three export market destinations were found not highly competitive market for coffee exports from Ethiopia.

Table 4.11 HHI value of market concentration level of the major Ethiopian coffee export market destinations (Calendar Years 1980 -2005) (in million tons)

	Ethiopian coffee export destinations						
Target market	Germany	Japan	USA	Saudi Arabia	France	Others	Total Export
Total export (in million tons) from 1980-2005	0.72	0.44	0.35	0.24	0.15	0.51	2.43
HHI	2973	1825	1466	996	651	2085	10,000

NB: Figures are the Researcher's calculation based on data collected from ICO

The market concentration level of Ethiopian coffee export to Japan and Other Ethiopian coffee importing countries accounted for HHI value of 1825 and 2085 and indicates moderate market concentration of the export target markets. Coffee exports to Germany accounted for

HHI value of 2973 which indicates a high concentration. Since, HHI value implies that the closer a market is to being a monopoly, the higher the market's concentration and the lower its competition. Thus, there is nearly perfect competition for Ethiopian coffee in France, Saudi Arabia, USA and Japan markets. While, Germany and other Ethiopian coffee export market destination countries were found monopoly market for Ethiopian coffee exporters (See Table 4.11).

Since, coffee export from Ethiopia to France, Saudi Arabia, USA and Japan were similar to a perfect competition market structure. Exporting to such markets has an implications that all coffee export firms to the above target markets are selling an identical product; being price takers (they cannot control the market price of their product) having relatively small market share with no barrier to entry and exit. Whereas, buyers (importing countries) have complete information about the product being sold and the prices charged by each firm and the industry is characterized by freedom of entry and exit.

4.1.11. Market retention potential of Indian and Ethiopian coffee export target markets

Marketing retention is the process of converting first-time customers into longer term, loyal customers. In order to examine the loyalty level of Indian and Ethiopian coffee export target markets (major export market destinations) the transitional probability matrix of Markov chain model was fitted. The model provides a broad indication of changes in the direction of export of coffee from India and Ethiopia from the year 1980-2005.

The row elements in the transitional probability matrix provide the information on the extent of loss in trade, on account of competing countries. The columns element indicates the probability of gains in volume of trade from other competing countries and the diagonal element indicates the probability of retention of the previous year's trade volume by the respective country (Kusuma and Basavaraja. 2014).

4.1.11.1. Market retention potential of Indian coffee export target markets

The major Indian coffee importing countries were Russian Federation (including the former USSR), Italy, Germany, USA, Japan and all other importing countries and were grouped under the category of the other countries.

It is evident from Table 4.12 that others followed by Italy and Russian Federation found the most stable markets among the major importers of Indian coffee as reflected by the probability of retention at 89 percent, 87 percent and 87 percent, respectively.

Table 4.12: Transitional probability matrix for coffee exports from India to major export destinations (Markov chain analysis), (Calendar years 1980 to 2005)

Export destinations	Russian Federation	Italy	Germany	USA	Japan	Others
Russian Federation	**0.87**	0.00	0.004	0.015	0.001	0.005
Italy	0.00	**0.87**	0.0007	0.00	0.005	0.114
Germany	0.00	0.17	**0.67**	00.68	0.009	0.00
USA	0.15	0.00	0.004	**0.68**	0.120	0.00
Japan	0.45	0.00	0.00	0.150	**0.350**	0.005
Others[10]	0.00	0.003	0.05	0.016	0.00	**0.89**

Source: The researcher's calculation based on data compiled from ICO
NB: Coffee export from India to the former USSR were incorporated under Russian Federation

Whereas, Japan and Germany export target market were the most unstable markets among Indian coffee importing countries with 35.32 percent and 66.66 percent retention. Italy retained with 87.30 percent and Russian Federation retained with 87.13 percent of total coffee export from India. The Others, Italy and Russian Federation markets witnessed high market retention to the Indian coffee.

Thus, the aforementioned three target markets should be a prominent strategic focus area of Indian coffee exporters to drive a better profit. Therefore, the present study recommends to strengthening the business ties between India with Others, Italy and Russian Federation. On the other hand, the unstable export market destinations (Japan and Germany) require policy interventions to help them stabilise.

4.1.11.2. Market retention potential of Ethiopian coffee export target markets

Based on the linear programming transitional probability matrix, Markov chain model results presented in Table 4.13 provide a broad indication of changes in the direction of export volume of coffee from Ethiopia for the period 1980-2005.

[10] *Indian coffee export destinations, which categorized as "Others" in the present study are Albania, Algeria, Argentina, Armenia, Australia, Bahrain, Bosnia and Herzegovina, Canada, China, Croatia, Egypt, Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Latvia, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Fiji, Georgia, Iceland, Iran, Iraq, Israel, Korea, Korea, Kuwait, Lebanon, Leeward Islands, Libyan Arab Jamahiriya, Macedonia, Malaysia, Monaco, Morocco, Myanmar, New Caledonia, New Zealand, Norway, Oman, Pakistan, Qatar, Saudi Arabia, Serbia, Singapore, South Africa, Sudan, Swaziland, Switzerland, Syrian Arab Republic, Taiwan, Tunisia, Turkey, Ukraine, United Arab Emirates, Indonesia, Peru, Uganda and Vietnam*

Table 4.13: Transitional probability matrix for coffee export from Ethiopia to major export destinations, (Markov Chain analysis) Calendar Years 1980 to 2005 (Unit in million tons)

Ethiopian coffee export destinations	Germany	Japan	USA	Saudi Arabia	France	Others
Germany	**0.775**	0.091	0.000	0.052	0.002	0.077
Japan	0.286	**0.645**	0.000	0.000	0.068	0.000
USA	0.114	0.000	**0.755**	0.000	0.068	0.062
Saudi Arabia	0.232	0.061	0.000	**0.612**	0.000	0.093
France	0.000	0.000	0.000	0.000	**0.330**	0.669
Others[11]	0.088	0.125	0.145	0.049	0.077	**0.512**

NB: Destination wise coffee export data from the year 2006-2009 were not incorporated due to unavailability of the data.

The major Ethiopian coffee importing countries based on market share of coffee are Germany, Japan, USA, Saudi Arabia, France and Others. It is evident from Table 4.13 that Germany followed by USA were found to be the two most stable markets among the major importers of Ethiopian coffee as reflected by the probability of total Ethiopian coffee export market retention at 77.58 percent and 75.51 percent, respectively. However, France and others were found as the most unstable coffee export market destinations (target markets) with probability of retention value of 51.24 percent and 33.02 percent, respectively. Whereas, Japan and Saudi Arabia retained 64.52 percent and 61.20 percent, respectively of the total coffee exports from Ethiopia.

Marketing retention implies the lifecycle marketing or loyalty marketing between buyer and seller (in this case, exporter country with importer country). A study by Bain and Company (2014), indicated that retention market should be a prominent focus area of any strategic business as is proved that a 5 percent increase in customer retention can generate up to 125 percent in profits. Therefore, the present study recommends to strengthening the business ties between Ethiopia and German as well as USA.

Furthermore, the unstable export market destinations (France and Others) require interventions to help them stabilise. This might be due to unstable price (movement of prices of coffee markets which tend to be exhibit considerable volatility), loss of bargaining power

[11] *Ethiopian coffee export destinations, which categorized as "Others" in the present study are Albania, Australia, Canada, China, Croatia, Djibouti, Egypt, Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, Greece, Ireland, Italy, Latvia, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Georgia, Iceland, Iran Islamic Rep. of, Japan, Israel, Jordan, Korea, Rep. of Lebanon, Libyan Arab Jamahiriya, Malaysia, Morocco, New Zealand, Norway, Russian Federation, Serbia, Singapore, South Africa, Rep. of Sudan; Suriname Sweden, Switzerland, Syrian Arab Republic, Taiwan, Tunisia, Turkey, Ukraine, United Arab Emirates, Indonesia, Kenya, Mexico, Tanzania and Venezuela Bol. Rep. Of.*

to major competing coffee importer countries and failing the long-term income resulted from an increasing supply of coffee. Hence, export subsidy that involves producers being paid a subsidy to export their surplus at artificially low prices is important. However, other countries may retaliate and protect their own producers from cheap imports because it can be argued that export subsidies are a form of unfair competition.

Conclusively, attempts were made to examine trend and composition of coffee export marketing in India and Ethiopia particularly the trend in production, domestic consumption, exports and prices paid to coffee growers from 1980-2010. Accordingly, the present study concluded that the Indian coffee sector witnessed a positive incremental growth in production, domestic consumption, export and prices paid to coffee growers throughout the study period and with the exception of trend in production the country witnessed a positive and significant growth in all the variables. On the other hand, with the exception of a negative incremental growth noted in the export volume of coffee during the pre-liberalisation period, the Ethiopian coffee sector witnessed a positive incremental growth in production, domestic consumption, export and prices paid to coffee growers throughout the study period.

The increase in the volume of coffee production in India directly reflected in the rise or drop in the volume of coffee export and domestic consumption during pre-liberalization period. However, the volume of coffee production did not reflect on the rise or drop in the volume of domestic consumption of coffee during post-liberalization period. On the other hand, the increase in production of coffee in Ethiopia reflected in the rise or drop of export while, the volume of domestic consumption of coffee was found independent from production almost throughout the study period.

Furthermore, based on trend in country wise export, Others, Italy and Russian Federation export target market of Indian coffee and Germany and USA export target market of Ethiopian coffee were found the most stable market with high retention potential. While, Japan and Germany export target markets for Indian coffee and France and Others export target markets for Ethiopian coffee were found the most unstable market.

Additionally, with the exception of Russian Federation, USA and Japan markets among major Indian coffee export destinations and USA market among Ethiopian major coffee export destinations, the growth in exports of coffee witnessed a positive and significant incremental growth for the study period.

Based on the market concentration analysis it was found that there is perfect competition in Italy, Germany, USA and Japan markets for Indian coffee exporters and there is a perfect competition in France, Saudi Arabia, USA and Japan markets for Ethiopian coffee exporters. While, Indian coffee exporters are monopoly in Russian Federation and Other export target markets of Indian coffee. Similarly, Germany and Others export target markets of Ethiopian coffee were found as monopoly market for Ethiopian coffee with less competition.

Certified Organic and Fairtrade coffee marketing practices in India and Ethiopia

Following the 1988 coffee crisis, Fair trade certification was introduced in Netherlands to artificially raise coffee prices in order to ensure growers receive remunerative prices sufficient wages when the supply of coffee was greater than the demand. Fairtrade is about better prices, decent working conditions and fair terms of trade for farmers and workers and supporting the development of thriving farming and worker communities that have more control over their futures and protecting the environment in which they live and work. Organic production is based on a system of farming that maintains and replenishes soil fertility without the use of toxic and persistent pesticides and fertilizers. Interestingly, most Fair Trade Coffees are organically grown, but not all organics are Fair Traded, they should be certified to realize the benefit of it.

In India the International Trade Center (ITC) has introduced community development initiatives in Orissa and also in Andhra Pradesh, the non-traditional coffee-growing states. Much of the coffee produced here is pesticide-free. ITC assists farmers to acquire organic certification. Best practices are taught under the guidance of the Coffee Board of India, with ITC bearing the certification costs. The problem with organic coffee in India is the lack of consistent supply despite the number of farmers, growers and exporters. ITC fills the gaps between the farmer, the grower and the exporter by helping to acquire certification and marketing the end product effectively." The organic coffee segment grows with information and awareness of its advantages" North Europe and the US are the primary markets. As Asian consumers become more affluent and educated, organic coffee can hope to see more prospects in the region. This strategic partnership led to the installation of a state-of-the- art coffee processing facility by SLN specializing in instant coffee powder and agglomerated coffee for the domestic and export markets (GOI.[n.d]).

In Ethiopia, in order to help small-scale coffee farmers take advantage of the Fair Trade coffee market, the viable alternative trade strategy the Ethiopia's Oromia Coffee Farmer's Cooperative Union (OCFCU) was established in 1999 in order to help the 100,000 farmer families working in Oromia cooperatives to get through the difficult price crisis. OCFCU comprises 34 cooperatives, cultivates 86,487 acres and has an average annual production of 16,507 tons, is known for its high quality coffee, all of which is heirloom, forest-grown, organic, bird friendly and smallholder produced. In only its third year, the OCFCU is already starting to return 70 percent of its gross profits back to the Fair Trade cooperatives, in order to help coop members. Similarly, the Sidama Coffee Farmers Cooperative Union (SCFCU) is an excellent example of what is possible through farmer organizing and connection to Fair Trade coffee roasters, which was formed in 2001 as a processing, marketing, and exporting union for 47 primary cooperatives in representing some 85,000 small-scale farmers. Fair Trade coffee helps to provide living wages to the farmers, and up to three times as much income as the average coffee producer. This income will help farmers provide for their families, increase their quality of life and allow them to continue working on their farms. By helping the Ethiopian coffee farmers economically, Fair Trade also provides the farmers with access to greater political power since they are organized in cooperative unions. Furthermore, the farmers learn about the democratic process through the democratically run cooperatives. Decisions connected to development are not dictated from above; instead, Fair Trade represents a "bottom-up" approach, respecting the rights of people to make their own decisions and thus respecting their dignity and cultural traditions (Gustaf. 2011).

SECTION II

4.2. Determinants of coffee export marketing in India and Ethiopia

In order to identify the determinants of coffee exports in India and Ethiopia, primary data was collected from Indian and Ethiopian coffee exporters through pretested questionnaire. Accordingly, the legal and political, socio-cultural, geographic, economic and competitive environmental factors were taken in to consideration to examine the determinants of coffee export marketing in India and Ethiopia. Non parametric test of the inferential statistical test - Kendall's W Test (coefficient of concordance) was fitted to measure the determinants of coffee export market in the two countries. The results are presented in the following subsequent six tables.

4.2.1. Legal and Political factors determining export marketing of Indian and Ethiopian coffee

Table 4.14: Legal and Political factors determining coffee export of marketing in Indian and Ethiopia

Legal and Political factors	Mean Rank	
	India	Ethiopia
The trade agreement between India/Ethiopia with different countries	4.39	4.39
Export and import duty protection imposed by the government of India/Ethiopia	3.93	6.71
The support made by the government of India/Ethiopia to promote exporter	6.00	6.46
The export policy of India/Ethiopia	5.89	6.57
The export regulation of the international market	5.46	5.89
Domestic export regulation and procedures	4.64	5.21
The existing export market supply chain	5.18	3.71
Fair trade certification of coffee	5.86	3.07
Barrier to entry	3.64	2.96

Source: Primary data collected from Indian and Ethiopian coffee exporters, 2014

NB:

W (for India) = 0.125 , (for Ethiopia) =0.357

Asymp. Sig.(for India) =0.081* *(for Ethiopia) = 0* .000

*significant at $\alpha = 0.05$, N=14

Hypotheses:H0: a lack of concordance between judges assessments, in the population represented by the sample, and H1: The judges' assessments in the population represented by the sample are concordant.

Among the legal and political factors determining the success of Indian coffee exporters, the support made by the government of India to promote coffee exporters ranked high (6.00) followed by the export policy of India (5.89) and implementations of Fair trade certification of coffee (5.86).

Barrier to entry was ranked least (3.64) followed by the export and import duty protection imposed by the government of India (3.93). However, the model further detected that the respondents were not significantly different in ranking the variables to find out the determinant legal and political factors for coffee export marketing in India. The result indicates that the judges' assessments were not statistically concordant since Kendall's W coefficient of concordance strength was found weak (0.125) with significance level of 0.081.

Similarly, the legal and political factors determining the success of Ethiopian coffee exporters, export and import duty protection imposed by the government of Ethiopia was ranked highest (6.71) followed by the export policy of the country with a mean rank of 6.57 and support made by the Government of Ethiopia to promote exporters 6.46 scored the highest rank. Whereas, barrier to entry was ranked least with a mean rank of 2.96, among the given legal and political factors determining export marketing of coffee in Ethiopia. The model further detected that the respondents were significantly different in ranking the variables to find out legal and political factors determining coffee export marketing in Ethiopia. It is inferred from the result that the judges' assessments were statistically concordant with coefficient of concordance strength of 0.357 at 0.00 significance level (Table 4.14).

4.2.2. Socio-Cultural factors determining the export marketing of coffee in India and Ethiopia

From the variables listed under the socio-cultural factors determining the export marketing of coffee in India, the educational background of the management of Indian coffee export firms ranked high (3.00) followed by the positive attitude, belief and values of the product's promotion by international customer with a mean rank of 2.5. Whereas, the compliance of product packaging designs towards the religious and social values of international customers ranked least (2.14) by the respondent.

Table 4.15: Socio-Cultural factors determining the export marketing of coffee in India and Ethiopia

Socio-Cultural factors	Mean Rank	
	India	Ethiopia
The language and communication of the product	2.36	2.64
The positive attitude, belief and values of the product's promotion by international customer.	2.50	2.61
The religious and social compliance of product packaging and layout to the international customer.	2.14	1.93
Educational background of the management of the company	3.00	2.82

Source: Primary data collected from Indian and Ethiopian coffee exporters

NB:

W (for India)= 0.114 (for Ethiopia) =0.160

Assimp. Sig (for India) = 0.189 , (for Ethiopia)= 0 .082

*significant at $\alpha = 0.05$, N= 14

Hypotheses:

H0: a lack of concordance between judges assessments, in the population represented by the sample and H1: The judges' assessments in the population represented by the sample are concordant.

Similarly, among the variables listed under the socio-cultural factors determining the export marketing of coffee in Ethiopia, the educational background of the management of Ethiopian coffee export firms ranked high (2.82) while, the religious and social compliance of the packaging and layout of Ethiopian coffee to the international customers ranked (1.93) as factor in determining coffee export marketing of Ethiopia (Table 4.15). In addition to the above, respondents further described the existing situation especially on product packaging perspective. They noted that before the establishment of the ECX, Ethiopian coffee exporters were using jute bag to export coffee. However, after establishment of the ECX coffee exporters are being forced to use containers and this might lead exporters to find difficulty to use their own packaging design and layout.

4.2.3. Geographic factor determining export marketing of coffee in India and Ethiopia

Among the different geographic variables given to identify the geographic determinants of exporting marketing of coffee in India, both the geographic location where coffee is being grown and the proximity of the export firms to major ports ranked high with mean rank of 2.07 and 2.07, respectively. Whereas, geographic proximity of the international buyers to India was ranked as the least in determining export marketing of coffee in India

Table 4.16: Geographic factor determining export marketing of coffee in India and Ethiopia

Geographic factors	Mean Rank	
	India	Ethiopia
The geographic location where coffee is being grown	2.07	2.79
Proximity of the export firm to major ports.	2.07	1.36
Geographic proximity of the international buyers to India/Ethiopia.	1.86	1.86

Source: Primary data collected from Indian and Ethiopian coffee exporters,2014

NB:

W (for India)= 0.43, (for Ethiopia) =0.701

Asymp. Sig. (for India)=0.513 (for Ethiopia) = 0.000

*significant at $\alpha = 0.05$, N= 14

Hypotheses:

H0: a lack of concordance between judges assessments, in the population represented by the sample and H1: The judges' assessment in the population represented by the sample is concordant.

Consequently, respondents were asked to share their experience on the export market behaviour specifically, whether the geographic location, where coffee is being grown affects the quality of coffee in the international market or not. Accordingly, 43 percent of the respondents indicated that the geographic location where coffee is being grown is one of the important factors which affect the test and preference of international customers of Indian coffee.

The respondents further identified that coffee grown in Weynad is the most preferred coffee by Indian coffee consuming countries for its difference in test, resulted from good altitude of the geographic location and technical knowledge of growers. Additionally, coffee grown in Coorg is preferred due to the suitable and conducive temperature and rain fall. Also, coffee grown in Chickmagalur and Araku valley which are situated in high elevation thus, has better quality. However, they further clarified that there are difference in qualities, flavours and test depending on the area where the coffee is grown. In connection to this, respondents noted that coffee grown in some part of the country like Assam and the North Eastern States is not preferable for export of value added (processed) coffee. The remaining (85.7 percent) of the respondents expressed their views based on their experiences in the coffee export market against the variables like the geographic location where coffee is being grown as it doesn't affect the quality of coffee in the international market.

Similarly, respondents from Ethiopia ranked geographic variables high in determining the export marketing of coffee. Accordingly, the geographic location where coffee is being

grown ranked high with a mean rank of 2.79 while, proximity of the export firms to major ports was ranked least important geographic variable in determining the export marketing of coffee in Ethiopia with mean rank of 1.36. It is inferred from the result that the judges' assessments were statistically concordant against the geographic variable (Table 4.16). Since, Kendall's coefficient of concordance strength to judge geographic factors determining export marketing of coffee in Ethiopia was found strong (0.701) with significance level of 0.000. Thus, significant difference among the rankings of the various components given under the geographic variables in determining export marketing of coffee in Ethiopian was noted among the respondents.

Additionally, respondents were asked to describe their experience on the export market behaviour specifically, whether the geographic location, where coffee is being grown affects the quality of coffee in the international market or not. Accordingly, majority (64.3 percent) of the respondents confirmed that the geographic location where coffee is being grown was found as one of the important factors which affect the test and preference of international customers. They further identified that the most preferred coffee by Ethiopian coffee consuming countries is, coffee which is grown in Yirgacheffe, Harar and Sidama due to their unique flavour, taste and acidity content. However, they further noted that there is preference of coffee grown at the different geographic locations of the country (such as coffee from Jimma and Lekempti) by Ethiopian coffee consuming countries due to their unique test. The remaining 35.percent of the respondents affirmed that the geographic location where coffee being grown doesn't affect the quality of coffee in the international market.

4.2.4. Economic factors determining export marketing of coffee in India and Ethiopia

Among the variables computed in identifying the economic factors determining coffee export marketing in India; both transportation cost and labour cost ranked higher (2.57) while, production and processing cost ranked least with a mean rank of 2.32. This might be due to the proximity of the country as well major exporters to major ports, which would ultimately reduce transportation cost.

On the other hand, the same variables were given to Ethiopian exporter to judge the different economic factors determining export marketing of coffee in Ethiopia. Accordingly, the fluctuations in the currency rate between different countries ranked higher with mean rank of 2.96.

Table 4.17: Economic factors determining export marketing of coffee in India and Ethiopia

Economic factors	Mean Rank	
	India	Ethiopia
Fluctuations in the currency rate between different countries	2.54	2.96
Production and processing cost	2.32	2.64
Transportation cost	2.57	1.93
Labour cost	2.57	2.46

Source: Primary data collected from Indian and Ethiopian coffee exporters,2014
NB: W (for India)= 0.013, (for Ethiopia)=0 .170
Asymp.sig (for India) = 0.908 (for Ethiopia)=0.068
**significant at α = 0.05 N=14*
***Hypotheses:** H0: a lack of concordance between Judges' assessments, in the population represented by the sample, H1: The judges' assessment in the population represented by the sample is concordant.*

However, transportation cost ranked as the least (1.93) important factors in determining export marketing of coffee in Ethiopia. This is because Ethiopia is a landlocked country and exporters are supposed to ship their exportable coffee to Djibouti port, which results in extra transportation costs.

4.2.5. Competitive environment determining export marketing of Indian and Ethiopian coffee

Table 4.18: Competitive environment determining export marketing of coffee in Indian and Ethiopian

Competitive environment	Mean Rank	
	India	Ethiopia
High demand of coffee in the domestic market	2.14	1.86
The existence of huge number of competitors in the coffee export market	1.50	1.86
Strong competitors strategy in the international market	2.36	2.29

Source: Primary data collected from Indian and Ethiopian coffee exporters,2014
NB:
W (for India)= 0.293, (for Ethiopia) = 0.093
Asymp.sig (for India) = 0.016 , (for Ethiopia) =0.273
*significant at α = 0.05 N=14
Hypotheses: H0: a lack of concordance between Judges' assessments, in the population represented by the sample, H1: The judges' assessment in the population represented by the sample is concordant.

From the variable given to rank competitive environments determining export marketing of Indian coffee, the existence of high demand of coffee in the domestic market scored the highest (2.14) rank followed by the existence of strong competitors strategy in the

international market (2.36). While, the existence of huge number of competitors in the coffee export market ranked least (1.5) importance in determining export marketing of Indian coffee (see Table 4.18).

Among the variables given to rank competitive environments determining export marketing of Ethiopian coffee, existing of strong competitors' strategy in the international market credited the highest (2.29) rank of coefficient of concordance being favourable to Ethiopian coffee exporters. However, both the existence of high demand of coffee in the domestic market and the existence of huge number of competitors in the coffee export market scored least (1.86) importance with a mean rank of 1.86 (Table 4.18). The reason may be almost half of coffee produced in Ethiopia is being consumed domestically; this can cause shortage in supply of coffee to the exporters, when there is huge volume demand of coffee in the export markets.

Overall rank of determinants of export marketing off coffee in India and Ethiopia

Among the twenty three variables given to measure the determinants of export marketing of Indian coffee, the geographic location (where coffee is being grown), the proximity of coffee export firms to major ports and proximity of the international buyers to India ranked as the top three determinant variables with a mean rank of 18.29, 18.1 and 16.50, respectively. However, the existence of large number of competitors in the coffee export market followed by the production and processing cost and barrier to entry ranked as the least determinants for the success of Indian coffee exporters with a mean rank of 6.29, 8.21 and 8.50, respectively (see Table 4.19).

Table 4.19: An overall rank of the determinants of export marketing of Indian and Ethiopian coffee

(Based on the five major variables: Legal and political, Socio-cultural, Geographic, Economic, and Competitive environmental factors)

Overall variables	Mean Rank	
	India	Ethiopia
The trade agreement made India/Ethiopia with different countries	10.04	10.25
Export and import duty protection imposed by the Government of India/Ethiopia	9.50	16.07
The support made by the Government of India/Ethiopia to promote exporters	14.43	14.86
The export policy of India/Ethiopia	13.86	15.14
The export regulation of the international market	12.32	13.64
Domestic export regulation and procedures	10.46	12.04
The existing export market supply chain	12.14	8.61

Overall variables	Mean Rank	
	India	Ethiopia
Fair trade certification of coffee	14.04	7.04
Barrier to entry	8.50	6.32
The language and communication of coffee being exported	13.57	13.61
The positive attitude, belief and values of international customers towards the promotion of Indian /Ethiopian coffee	14.04	14.04
The religious and social compliance of exportable coffee packaging and layout to the international customer	13.11	9.50
Educational background of the management of the export firm	16.25	14.46
The geographic location where coffee is being produced	18.29	19.96
Proximity of the export firms to major ports	18.18	11.18
Proximity of the international buyers to India/ Ethiopia	16.50	13.96
Fluctuations in the currency rate between different countries	9.32	12.54
Production and processing cost	8.21	11.82
Transportation cost	8.86	7.79
Labour cost	9.07	11.00
High demand of coffee in the domestic market	8.93	9.93
The existence of huge number of competitors in the coffee export market	6.29	9.61
Strong competitors strategy in the international market	10.11	12.64

Source: Survey data collected from Indian and Ethiopian coffee exporters, 2014

NB:

W (for India)= 0.277 (for Ethiopia) = 0 .252

Asymp.sig (for India) = 0.000, (for Ethiopia) =0.000

**significant at α = 0.05 N=14,* Chi-Square=85

Hypotheses: H0: a lack of concordance between judges assessment, in the population represented by the sample, H1: The judges' assessment in the population represented by the sample is concordant.

The model detected that among the 23 variables given to measure the determinants of export marketing of Ethiopian coffee, the geographic location (where coffee is being grown), export and import duty protection imposed by the government of Ethiopia and the export policy of the country were ranked high being the top three determinant variables with mean rank of 19.96, 16.07, and 15.4, respectively. However, barrier to entry and procedure for fair trade and certification of coffee ranked least with mean rank of 6.32 and 7.04, respectively being less important (Table 4.19). The diverse agro-climatic conditions prevailing in the coffee growing areas of Ethiopia allows production of high quality coffee Arabica with a wide range of taste (such as acidic, aromatic, flavourful) which can satisfy the buyers interest in the

different parts of the World and would place the geographic location where coffee is produced the highest rank.

Conclusively, attempts were made to identify the determinants of coffee export from India and Ethiopia. Five major variables Viz., legal and political, socio-cultural, geographic, economic, and competitive environmental factors were taken in to account to examine and identify the major determinant variables in the coffee export marketing of the two countries.

Accordingly, the support made by the government of India to promote coffee exporters, the educational background of the management of Indian coffee export firms, the geographic location, the proximity of coffee export firms to major ports, transportation and labour cost, the existence of high demand of coffee in the domestic market were found as the major determinants of export marketing of coffee in India taking the legal and political, socio-cultural, geographic, economic and competitive environmental factors in to account.

In Ethiopia, export and import duty protection imposed by the government, the educational background in the management of Ethiopian coffee export firms, the geographic location where coffee is being grown, the fluctuations in the currency rate between different countries and existing of strong competitors' strategy in the international market were found as the major determinants of export marketing of coffee in Ethiopia taking the legal and political, socio-cultural, geographic, economic and competitive environmental factors in to account. However, the geographic location, where coffee is being grown was found with highest mean rank in both countries being the major determinants of coffee export marketing in India and Ethiopia.

SECTION III

4.3. Coffee export marketing strategies for India and Ethiopia

4.3.1.The existing and future coffee export marketing strategies of India and Ethiopia

In order to better understand and design the existing and future export marketing strategies of Indian and Ethiopian coffee exporters, primary data was collected from Indian and Ethiopian coffee exporters by using pre-tested questionnaires. The questionnaire was designed to address issues mainly on the major existing and future coffee export marketing strategies of the two countries from the four marketing mix dimensions. Furthermore, the export market positioning strategies, brand image building strategies and the export competitive advantage of the two countries were addressed. Additionally, major challenges exhibited in India and Ethiopia across their coffee export market supply chain were identified.

4.3.1.1.The existing and future coffee export marketing strategies of India

To figure out the type of export marketing strategies which are being implemented, planning to be implemented in the future and strategies, which were implemented but currently which are not applicable to the Indian coffee exporters, descriptive frequency of percentage analysis was employed.

Furthermore, in the analysis of the present study coffee export market positioning strategies, brand positioning strategies and competitive advantages of Indian coffee exporters and major challenges exhibited in the Indian coffee export market were taken in to consideration. Results are presented in the following eight consecutive tables.

4.3.1.1.1. Export promotional strategies of Indian coffee exporters

Respondents were asked to express their opinions on different issues related to export promotional strategies of Indian coffee exporters. About two-third (64.3 percent) of the respondents indicated that providing leaflet, pamphlet, poster about their product (coffee) and also offering direct mailing promotion to international customers were being implemented as a means of promotional strategies of Indian coffee exporters.

Table 4.20: Export promotional strategies of Indian coffee exporters

Export promotional strategies of Indian coffee exporters	Frequency			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing Value (%)
Providing special offer to international customers	35.7	28.6	28.6	7.1
Offering coffee for new customers for user trial	50	14.3	35.7	0
Offering direct mailing promotion to international customer	64.3	0	35.7	0
Offering leaflet/pamphlet/poster about the coffee which is being exported	64.3	0	28.6	7.1
Offering free gift to regular customers at some regular intervals	14.3	14.3	28.6	42.85
Taking initiative to arrange extraordinary events to promote Indian coffee at the international market.	57.1	14.3	14.3	14.3
Participating on different business-expo by representing the export firms	57.1	14.3	21.4	7.1
Providing incentive to certified coffee supplier (producer)	28.6	28.6	21.4	21.4
Deliberate featuring of the exportable coffee (brand) in film or Television programme	14.3	14.3	64.3	7.1

Source: Primary data collected from Indian coffee exporters, 2014
NB: N=14

In respect of export promotional strategies, 57.1 percent of the respondents also affirmed that participating in different business-exhibition by representing their company and taking initiative to arrange extraordinary events to promote Indian coffee at the international market are presently being implemented as promotional strategies of Indian coffee exporters.

However, 64.3 percent of the respondents affirmed that they are planning to use deliberate featuring of Indian coffee (brand) in film or television programme followed by 35.7 percent of the respondents also planning to offer direct mailing promotion to international customer and offering coffee for new customer for user trial as the future promotional strategies of Indian coffee exporters (Table 4.20).

Subsequently, respondents were asked contingency questions to indicate whether there were any institutions in India promoting Indian coffee in the international market. Accordingly, all

(100 percent) the respondents unanimously indicated that there are organizations responsible for promoting Indian coffee in the international market. All the respondents also mentioned that Coffee Board of India is one of the Government bodies playing pivotal role in promoting Indian coffee in the international market

4.3.1.1.2. Export distribution (Place) strategies of Indian coffee exporters

From (Table 4.21), exporters were asked to express their opinions on different issues related to export distribution (place) strategies of Indian coffee exporters. Reaching customers via their mail order was found as one of Indian coffee export distribution strategy which is currently being used by majority (85.7 percent) of the respondents.

Table 4.21: Export distribution (Place) strategies of Indian coffee exporters

Export distribution (Place) Strategies of Indian coffee exporters	Frequency			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing Value (%)
Reaching customers via their mail order	85.7	7.1	7.1	0
Using better channel coverage than other coffee exporting countries.	35.7	21.4	28.6	14.3
The quality of coffee is not compromised throughout the market supply chain by using appropriate logistics and inventory system.	78.6	7.1	14	0
Providing sufficient information about the product on the company website (online) to the customer.	57.1	42.9	0	0
Products are being distributed using channel of mail order	64.3	7.1	14.3	14.3
Product are being distributed using retailer channel	21.4	14.3	50	14.3
Product are being distributed using internet (online application)	3	0	64.3	14.3
Product are distributed using wholesaler	78.6	7.1	14.3	0

Source: Primary data collected from Indian coffee exporters,2014
NB: N=14

Similarly, 78.6 percent of the respondents opined that they are meeting their customers demand without compromising the quality of coffee throughout the market supply chain by using appropriate logistics and inventory system and 64.3 percent of the respondents opined that they were distributing their product (coffee) using wholesaler. Above two third (64.3 %) of the respondents affirmed that they are distributing their product using channel of mail order as a means of export distribution strategy. Similarly, 57.1 percent of the respondents

were providing sufficient information about their product using their company's website as a means of export distribution (place) strategies of Indian coffee exporters, which are being implemented. However, 64.3 percent of the respondents affirmed that they are planning to distribute their product using retail channel and half (50 %) of them were planned to employ online application for purchase order and related export transaction as the future export distribution (place) strategies of Indian coffee exporters (Table 4.21).

Respondents were asked additional contingency question to indicate to which distribution channel the exported coffee is being sold. It was noted that about 57.1 percent of the respondents were selling their product to more than one distribution channels. While, 35.7 percent of the respondents indicated that they were selling their product to export agents at the international market, 35.7 percent of them to processors, 28.5 percent of them to whole seller, 21.4 percent of them to Multi-National Companies, 14.2 percent of them to retailers and the remaining 14.2 percent to exporters. The reason for majority of the respondents employing more than one distribution channels might be due to unavailability of consistent regular customers and demand in the market.

4.3.1.1.3. Export product strategies of Indian coffee exporters

The respondents were asked to express their opinions towards the different issues related to export product strategies of Indian coffee exporters. Above 50 percent of the respondents confirmed that all the variables given to assess the export product strategies of Indian coffee exporters were found as strategies which are already in place.

Table 4.22: Export product strategies of Indian coffee exporters

Export product strategies of Indian coffee exporters	Frequency			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing Value (%)
The variety of coffee produced in India is preferable variety in the international market	92.9	0	0	7.1
Preferred supplier system	78.6	0	7.1	14.2
Offering certified organic coffee	64.3	0	3	7.1
Offering specialty coffee	85.7	0	7.1	7.1
Offering high quality coffee better than other coffee exporter countries exporters	57.1	7.1	14.3	21.4
The brand of India Coffee is highly acceptable at the international market	71.4	0	7.1	21.4

Export product strategies of Indian coffee exporters	Frequency			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing Value (%)
than competitors' brand.				
The contents of the packaging and design of coffee exported from India complies with the culture, need and customs of international customer.	71.4	7.1	7.1	14.3
Offering fair trade coffee	78.57	0	14.3	7.1

Source: Primary data collected from Indian coffee exporters, 2014
NB: N=14

Concerning the export product strategies, which are currently being implemented by Indian coffee exporters presented in Table 4.22 the result indicates that majority (92.9 %) of the respondents were supplying preferable coffee variety, followed supplying specialty coffee (85.5%), supplying fair trade coffee (78.6 %) and the same number (78.6 %) of the respondent follow preferred supplier system as export product marketing strategies of Indian coffee exporters. 71.4 percent of the respondents confirmed their compliance in the contents of the product packaging and design of coffee exported from India with the culture, need and customs of international customer and 71.4 percent of respondents opined that acceptability of the brand of Indian coffee is higher than competing coffee exporting countries brands in the international market. Furthermore, 64.3 percent of the respondents confirmed that they were offering certified organic coffee while, 21.4 percent of them are planning to supply certified organic coffee.

4.3.1.1.4. Major deficiencies reducing the quality of Indian coffee at the export market

Respondents were asked to indicate the major deficiencies which may seriously reduce the quality of exportable Indian coffee. Accordingly, the following major deficiencies which affect the quality of exportable Indian coffee are identified by the respondents.

- less awareness of coffee growers about the importance of coffee quality
- unfavourable climatic condition (vagaries of weather, drought, excessive or insufficient rainfall)
- coffee disease like white stem borer
- lack of sufficient extension support
- lack of skilled labourers
- lack of consistent agro-processing firms

- lack of logistics facility during monsoons season to pack and store in a ware houses in order to maintain the quality
- high operational cost and high fluctuation in coffee prices
- inconsistent demand (seasonal demand and buying pattern) and
- existence of high competition which leads exporter to keep exportable coffee for a long time which might result in quality deterioration in the absence of well-organized logistics (warehouse) facilities.

4.3.1.1.5. Indian coffee industry from value added products of coffee perspective

To identify the percentage of value added coffee products the respondents were asked to indicate whether they were providing value added processed coffee to international market. Majority (78.6 percent) of them were providing value added processed coffee in the export market while, only, 21.4 percent of them were not providing value added processed coffee in the export market.

Respondents were further asked to indicate whether they were providing value added processed coffee to local market. The results indicates that only 50 percent of the respondents were providing value added processed coffee to the local market, while, 42.85 percent of them were not providing value added processed coffee to local market and 7.1 percent of the respondent didn't address the question. They were also asked to identify the major challenges for Indian coffee exporter to provide value added processed coffee to the domestic and international markets. The following are the major inhibiting challenges for Indian coffee exporters to provide value added processed products of coffee to the domestic and international markets.

- High processing and operational cost
- High cost of planting coffee processing technology
- Low demand for processed value added products of coffee in the export market
- Lack of high quality coffee for further value addition
- High labour cost specially, for providing specialty coffee
- Cost of packaging materials are high compared to overseas
- Lack of consistent demand in the market for value added products of coffee
- Lack of finance to meet sudden huge demand in the market and ultimately will result to transfer the demand from one exporter to other exporter.

Furthermore, interview was made with the Secretary of Coffee Board of India on issues related to the marketing strategies of India to promote exporting of value added products of coffee. The Secretary of Coffee Board of India indicated that the Government of India (GOI) has arranged a scheme of providing incentives of Rs. 2/kg for export of value added coffee in retail packs of less than 500 grams as Indian brand.

4.3.1.1.6. Export pricing strategies of Indian coffee exporters

Respondents were asked to indicate the export pricing strategies of Indian coffee export firms. 78.6 percent of the respondents affirmed that Indian coffee export firms are following premium pricing strategy while, 57.1 percent of the respondents are offering credit term to the customer as the major export pricing strategies of Indian coffee exporters.

Table 4.23: Export pricing strategies of Indian coffee exporters

Export pricing strategies of Indian coffee exporters	Frequency			
	Being done %	Done but not now (%)	Planning in future (%)	Missing Value (%)
Offering least price method	21.4	21.4	7.1	50
Offering off price method	35.7	28.6	0	57.1
Offering discount price	35.7	28.6	0	35.7
Offering credit term to the customer	57.1	7.1	0	35.7
Offering premium price	78.6	0	0	21.4

Source: Primary data collected from Indian coffee exporters, 2014
NB: N=14

However, only 7.1 percent of the respondents affirmed that they are planning to follow least pricing strategy in the future. It is one of the three generic marketing strategies (differentiation strategy and focus strategy for the other two) that can be adopted by any company, and is usually employed where the product has few or no competitive advantage or where economies of scale are achievable with higher production volumes.

Furthermore, 7.1 percent of the respondent further indicated that Indian coffee exporters are being following Indian commodity pricing strategy with a margin included by the export firm (Table 4.23). Additionally, respondents further mentioned that Indian coffee exporters are offering market price and price discount for regular buyers as one of the export pricing strategy.

Additionally, respondents were asked contingency questions regarding their pricing strategy for the different quality of coffee supplied by coffee growers. 42.85 percent of the

respondents said that they were paying higher price for better quality of coffee supplied by the coffee growers. However, 35.7 percent of the respondents confirmed that they did not recognize the quality of coffee through paying better price. This is mainly because they grow, cure and export coffee by themselves. The remaining 28.57 percent of the respondents did not address the question.

4.3.2. Indian coffee export market positioning strategies

Respondents were asked to compare the kind of marketing efforts made to position the brand of Indian coffee in the international customers mind against other competing coffee exporter countries marketing efforts. The result indicates that 42.9 percent of the respondents confirmed that Indian coffee exporters are employed a better export market targeting and 37.7 percent of them also confirmed that they have a better product positioning strategy than competing coffee exporters.

Table 4.24: Marketing efforts made to position the brand of Indian coffee in the international customers mind

Marketing efforts made to position the brand of Indian coffee	Frequency				
	Not as good as competitors of India coffee exporter (%)	As good as competitors of Indian coffee exporter (%)	Better than competitors of Indian coffee exporter (%)	Do not know (%)	Missing value (%)
Pricing strategy	92.9	0	7.1	0	0
Product quality	7.1	71.4	21.4	0	0
Distribution strategy	71.4	21.4)	0	7.1	0
Promotional strategy	35.7	57.1)	0	7.1	0
Export market segmentation strategy	42.9	35.7)	21.4	0	0
Export market targeting	7.1	35.7)	42.9	7.1	7.1
Product positioning strategy	7.1	50)	35.7	0	7.1

Source: Result generated from primary data collected from Indian coffee exporters, 2014
NB: N=14

Furthermore, 21.4 percent of the respondents also affirmed that coffee exported from India is better than the quality of coffee from other competing coffee exporter countries. Similarly, above half (71.4 % and 57.1 %) of the respondents affirmed that Indian coffee exporters are as good as competitors of Indian coffee exporters in their product quality and promotional strategy, respectively.

Half (50 %) of the respondents also affirmed that Indian coffee exporters are as good as competing coffee exporters in product positioning strategy, and 35.7 percent of them in export market targeting strategy and also 35.7 percent of them in export market segmentation strategy. However, majority of (92.9%) of the respondents and (71.4%) of the respondents confirmed that Indian coffee exporters are not as good as competitors of India coffee exporters in the existing export pricing strategy and distribution strategy respectively (Table 4.24).

The marketing efforts made to position the brand of Indian coffee in the international customers mind better than competitors of Indian coffee exporter in product quality might be due to the availability of favourable agro-climatic and geographic environment for producing quality coffee in India. Similarly, better export market segmentation strategy and export market targeting might be resulted from the strong economic and bilateral trade agreements made between India and different part of the World (importing countries); like with Russia Federation (Rupee-Rouble Agreement). Furthermore, the existence of better product positioning strategy might be due to the unprecedented effort of Coffee Board of India to introduce Indian coffee in different part of the world through conducting coffee conferences, festivals and exhibitions.

4.3.3. Brand image building strategies of Indian coffee

Respondents were asked to indicate the marketing strategies employed to build the brand of Indian coffee in the international market particularly among customers. Accordingly, the result indicates that majority (92.9 %) of the respondents indicated that that India has built a good impression about the country in tourists coming from different countries. The same number (92.9 %) of the respondents affirmed that their export firms have complete details of their products which are being sold and 85.7 percent of the respondents confirmed their participation on trade show. 85.7 percent of the respondents also affirmed that their export firms have indicative price lists, photographs or actual products to show at a trade show (Table 4.25).

Table 4.25: Marketing strategies employed to build the brand of Indian coffee in the international customer mind

Marketing strategies to build the brand of Indian coffee in the international market	Frequency	
	Yes (%)	No (%)
Media coverage given to the brand of Indian coffee by the world press and television is high	42.9	57.1
The role of export promotion Agency to introduce the brand of Indian coffee at the international market is high	78.6	21.4
The occurrence of extraordinary events which may affect international perceptions of the country is high.	71.4	28.6
Tourists from other countries have a good impression about India from their personal experience.	92.9	7.1
Indian coffee exporters are linked with multinational companies to facilitate their marketing effort?	64.3	35.7
Does your company have participated on a trade show?	85.7	14.3
Does your company have complete details of the products (coffee) that you are selling?	92.9	7.1
Does your company have indicative price lists, photographs or actual products where feasible at a trade show?	85.7	14.3
Does your company have a person who know two or three major foreign languages during the trade show, to translate for prospective customers	42.9	57.1

Source: Primary data collected from Indian coffee exporters, 2014
NB: N=14

Furthermore, 78.6 percent and 71.4 percent of the respondents noted that export promotion agency is playing prominent role in introducing Indian coffee at the international market and the high occurrence of extraordinary events which may affect international perceptions of the country's product, respectively were found as the major marketing strategies employed to build the brand of Indian coffee in the minds of international customers.

However, 57.1 percent of the respondents confirmed that no marketing effort was made to build the brand of Indian coffee in the international customer mind by giving media coverage to Indian coffee in the world press and television. Similarly, 57.1 percent of the respondents indicated that the export firms were not having a person who knows two or more major foreign languages during the trade show, to translate for prospective customers and also 35.7 percent of them affirmed that they were not linked with multinational companies to facilitate their marketing effort (Table 4.25). Some of the respondents were further noted that when exporters receive sudden high volume of demand of coffee from international customer exporters are in need of financial assistance to meet the sudden demand.

4.3.4. Competitive advantage of Indian coffee exporters in the perception of the respondent

Competitive advantage refers to superiority gained by an organization when it can provide the same value compared to its competitors but at a lower price, or can charge higher prices by providing greater value through differentiation. Essentially, a competitive advantage answers the question: "Why should the customer purchase from this operation rather than the competition?"(Barone and DeCarlo.2003). On this regard, respondents were asked their perception to compare the competitive advantage of Indian coffee exporters against other competing coffee exporter countries (Table 4.26). The result indicates that more than 75 percent of the respondents confirmed that the competitive advantage of Indian coffee exporters were found as good as or better than competing coffee exporter countries in all the variables given to compare.

Table 4.26: Competitive advantage of Indian coffee exporters

Competitive advantage of Indian coffee exporters	Frequency			
	Not as good as competitors of Indian coffee exporters (%)	As good as competitors of Indian coffee exporters (%)	Better than competitors of Indian coffee exporters (%)	Missing value (%)
Product quality	0	64.3	28.6	7.1
Product variety	7.1	57.1	35.7	0
Product technology for value addition	0	71.4	28.6	0
Product flavour and taste	0	71.4	28.6	0
Marketing information collection	14.3	14.3	71.4	0
Pricing of the products	7.1	85.7	7.1	0
Advertising and sales promotion	14.3	71.4	14.3	0
Brand image of Indian coffee	7.1	50	35.70	7.1
Packaging	0	78.6	21.4	0
Distribution co-ordination	7.1	92.9	0	0
Transportation facilities	7.1	71.4	21.4	0
Communication facilities	0	78.6	21.4	0
Customer credit facilities	0	85.7	0	14.3
Customer relationship	0	71.4	28.6	0
Efficient supply chain	7.1	57.1	35.7	0
Comply with the export orders effectively	0	78.6	21.4	0

Source: Primary data collected from Indian coffee exporters, 2014
NB: N=14

Furthermore, the result indicates that 71.4 percent of the respondents confirmed that Indian coffee exporters have better competitive advantage than other competing coffee exporter countries, in collecting market information and 35.7 percent of the respondents in product variety, efficient supply chain and brand image in the export market. A few (28.6 %) respondents were also confirmed that Indian coffee exporters have a better competitive advantage than other competing coffee exporter countries in product quality, product flavour and taste, product technology for value addition. While, 21.4 percent of the respondents confirmed their compliance with the export orders effectively, customer relationship, communication facilities, transportation facilities and product packaging better than other competing coffee exporter countries.

Similarly, no single respondent was confident enough to confirm that Indian coffee exporters have a better competitive advantage against other competing coffee exporter countries related to customer credit facilities and distribution co-ordination. While, only 14.3 percent of the respondents affirmed that their competitive advantages were not good as competing coffee exporter countries particularly in the collection of market information and advertising, and sales promotion. Only 7.1 percent of the respondents were found that their competitive advantages were weaker than other competing coffee exporter countries in product variety, pricing of their products, brand image, distribution co-ordination, transportation facilities and efficient supply chain.

From the result (Table 4.26) it can be inferred that even though some of the respondents' competitive advantage was found weaker than other competing coffee exporter countries, majority of the respondents are of the opinion that their competitive advantages found the same or better than other competing coffee exporter countries in all the variables given to measure their competitive advantage. Therefore, it is further concluded that Indian coffee exporters' competitive advantage was found better than other coffee exporting countries as it was opined by the respondents.

4.3.4. The strategic position of Indian coffee export firms

The strategic position is concerned with the impact on strategy of the external environment, internal resources and competences, and the expectations and influence of stakeholders. Together, a consideration of the environment, strategic capability, the expectations and the purposes within the cultural and political framework of the organisation provides a basis for

understanding the strategic position of an organisation (Johnson and Scholes. 2005). In Table 27, respondents were given different variables to indicate the strategic position of Indian coffee exporters. Accordingly, all (100 percent) the respondents confirmed that Indian coffee exporting firms have management committed to develop export market and willing and able dedicated staff, time and resources to the export process. The same number (100 percent) of respondents confirmed that their export firms are equipped with adequate knowledge of shipment of their product overseas, such as identifying and selecting of international freight forwarders and freight costing.

Table 4.27: The strategic position of Indian coffee export firms

The strategic position of Indian coffee Export firms	Frequency	
	Yes (%)	No (%)
Does your company have coffee (product) that has been successfully sold in the domestic market?	85.7	14.3
Does your company is preparing for an international marketing plan with defined goals and strategies?	85.7	14.3
Does your company have sufficient supply capacity that can be committed to the export market?	92.9	7.10
Does your company have the financial resources to actively support the marketing of your products in the targeted overseas markets?	92.9	7.10
Is your company's management committed to develop export markets and willing and able to dedicate staff, time and resources to the process?	100	0
Is your company committed to provide the same level of product given to your domestic customers?	92.9	7.10
Does your company has adequate knowledge of modifying product packaging and contents to meet foreign import regulations and cultural preferences?	85.7	14.3
Does your company has adequate knowledge in shipping its product overseas, such as identifying and selecting international freight forwarders and freight costing?	100	0
Does your company have adequate knowledge of export payment mechanisms, such as developing and negotiating letters of credit?	85.7	14.3

Source: Primary data collected from Indian coffee exporters, 2014
NB: N=14

While, 92.9 percent of the respondents confirmed that their export firms are committed to provide the same level of product supplied to their domestic customers, have the financial resources to actively support their marketing effort in the targeted overseas markets and they also have sufficient supply capacity that can be committed to the export market. Additionally, 85.7 percent of the respondents were further affirmed that their export firms have adequate knowledge of export payment mechanisms (such as developing and negotiating letters of credit), adequate knowledge of modifying product packaging and contents to meet foreign

import regulations and cultural preferences. Similarly, 85.7 percent of the respondents have coffee (product) that has been successfully sold in the domestic market and their export firms are preparing for an international marketing plan with defined goals and strategies.

Furthermore, it was noted that above 85 percent of the respondents confirmed their compliance in satisfying all the variables given to assess the strategic position of Indian coffee export firms. Therefore,. the present study concludes that the strategic position of Indian coffee export firms was found in a good status though it needs continuous marketing effort.

4.3.5. Marketing strategies to improve the competitiveness of Indian coffee exporters

Respondents were asked to identify marketing strategies for the Indian coffee industry to improve export competitiveness in the international market. Accordingly, the following strategies are identified:

- Organizing conference for coffee exporters to discuss export strategic issues
- Government should provide incentives for coffee exporters
- Improving the quality of coffee and providing better quality coffee throughout the coffee supply chain starting from coffee growers,
- Providing more up-to-date market information for coffee exporters about the detailed information and preferences of prospective buyers located in various countries,
- Coordinating of coffee exporters to meet their expenses in using export containers efficiently on sharing basis with other coffee exporters,
- Providing financial means for coffee exporters to procure quality coffee throughout the year and at the same time to supply (export) the same quality of coffee in the export market,
- Organizing coffee expo in India and arranging coffee expo visit for Indian coffee exporters to different countries to better understand and meet their consumer preferences,
- Organizing awareness creation programme on the importance of coffee quality for all stakeholders throughout coffee supply chain and promotion of quality as a product positioning theme for Indian coffee and
- Increasing the publicity of Indian coffee through different mass media.

Consequently, respondents were asked to express their view to what extent technical assistance is being provided to Indian coffee exporters in the coffee export marketing process. Accordingly, 50 percent of the respondents affirmed that there is no technical assistance extended to Indian coffee exporters in the marketing process of coffee. Whereas, 50 percent of the respondents claimed that, the technical assistance is being provided to India coffee exporters. Respondents were further asked to brief the type of technical assistance provided. Accordingly, the major technical assistance provided to Indian coffee exporters as national level marketing strategy include helping exporters to participate and find out prospective buyers in exhibitions and trade fairs, advice on the recent market trend in the international market by the Coffee Board of India. Additionally, technical assistance was provided by the research stations related to cultivation, weather, export practices, marketing, and promotion. In addition to the above stake holders, the Charted Account Company secretary, Shipping agents and Ministry of Commerce and Government of India (GOI) have played significant role in extending technical assistance to the Indian coffee exporters.

In order to assess the export risk mitigation and risk of loss recovery mechanisms of Indian coffee exporters in the export process respondents (Indian coffee exporters) were asked to explain the mechanisms in which Indian coffee exporters are mitigating their risk of loss in the export marketing of coffee. Accordingly, 100 percent of the respondents confirmed that their export firms are under insurance coverage. The respondents further noted that all Indian coffee exporters are under the insurance coverage of Export Credit Guaranty Cooperation (ECGC).

Additionally, respondents were asked to indicate if there were systems which link them with smallholder farmers through contract farming which put mechanisms in place for coffee quality control in order to strengthen export sector. It was found that only 7.1 percent of the respondents said that there is a system which links smallholder farmers with coffee exporter through contract farming. However, majority (64.28 percent) of them affirmed that there is no such systems to put mechanisms in place for coffee quality control in order to strengthen export sector and 14.28 percent of the respondent didn't address the question .

4.3.6. Major challenges exhibited across the Indian coffee export marketing system

Respondents were asked to identify the major challenges, which are being exhibited at the different stage of Indian coffee export supply chain. Accordingly, the following are major

challenges which Indian coffee exporters are facing at the different stage of coffee export supply chains.

a) Challenges from coffee growers to coffee exporters

- Setting the price of coffee to the coffee grower is difficult due to exporters competition
- Shortage of coffee beans when it is demanded in bulk
- Poor quality coffee supply by the coffee growers
- High labour cost and high cost of operation being both coffee grower and exporter in sustaining quality
- High price seasonality in the market,
- Failing to meet delivery schedule problem between coffee suppliers (growers) and exporters
- Sometimes the quality of coffee supplied by coffee grower does not move in line with demand from the export market.
- The price demanded by coffee grower sometimes almost equal with the price at the international market and also sometimes growers may realize lower price while export price is high

However, some of the respondents who own coffee plantation, undertake curing and exporting of coffee by themselves noted that they are not facing some of these challenges.

b) Major challenges from coffee exporters to export agents

- Pricing is being influenced by the supply of coffee from different countries to the target export market agents
- Sometimes existence of natural calamities
- High competition of exporters and export agents made the transaction very tough to sustain.
- High price fluctuation
- Demand fluctuation (inconsistent demand) and existence of unpredictable demand
- Existence of long waiting time to export the product at the right price especially, coffee purchased at a higher price from supplies will be expected to watch for the market price to go up.

c) **Major challenges from exporters to the international market (final consumers)**

- Existence of high price fluctuation
- Using low quality packaging material
- Noncompliance with delivery schedule resulted from vessel delay, failing to get the demanded bulk quantity of coffee and sometimes quality issues
- International market fluctuation,
- Vessel delay
- Higher domestic price fluctuation

In addition to the above respondents were asked to mention firm level export marketing challenges in the export supply chain. Accordingly, the following major export market challenges which were exhibited in the export marketing of coffee were identified:

- Existence of high number of price speculation in the coffee export market,
- High cost of running the export market with high price fluctuation,
- High competition in the export market,
- Variety in the quality of coffee being supplied by growers,
- Less demand in bulk quantity thus, exporters are forced to export assorted food, and food varieties like tea,
- The market depends on international demand,
- Difficulty to get regular buyers, willing to buy a certain quantity every year,
- High competition with coffee exporters from other countries,
- Unfavourable weather condition to maintain quality,
- Decrease in demand would lead high transportation cost, this is mainly because exporters are paying transportation cost per the number of container rather than the volume of coffee being exported and
- Difficulty to advertise individual product (firm level product) in International media due to its high cost.

4.3.7. Existing and future coffee export marketing strategies of Ethiopia

In order to better understand and design the existing and future export marketing strategies of Ethiopia, primary data was collected from Ethiopian coffee exporters using a pretested questionnaire. The questionnaire was designed to address issues mainly on the major existing and future export marketing strategies of the Ethiopia from the four marketing mix dimensions. Furthermore, the export market positioning strategies, brand image building strategies and the export competitive advantage of the two countries were addressed. Additionally, challenges exhibited across the coffee export market supply chain in Ethiopia were identified.

Descriptive frequency of percentage analysis was employed to figure out the type of export marketing strategies which are being implemented, planning for implementation of future and strategies which were employed before but currently not applicable to the Ethiopian coffee exporters. Accordingly, the results are presented based on the four basic variables of export marketing strategies viz., export promotion strategies, export pricing strategies, export product strategies, and export distribution (place) strategies. Furthermore, in the analysis of the present study, coffee export market positioning strategies, brand positioning strategies and competitive advantages of Ethiopian coffee exporters and major challenges exhibited in the Ethiopian coffee export market supply chain were also taken in to consideration.

4.3.7.1. Export promotional strategies of Ethiopian coffee exporters

Exporters were asked to express their opinion on different issues related to export promotional strategies of Ethiopian coffee exporters. Majority (78.6 percent) of the respondents affirmed their participation on different business-expo in representing the export firms followed by 64.3 percent of the respondents affirmed that they were providing special offer to international customer and offering coffee for new customer for user trial as the promotional strategies of Ethiopian coffee exporters.

However, majority (78.6 percent) of the respondents were planning to use deliberate featuring of the brand of Ethiopian coffee in film or television programme followed by 57.1 percent of the respondents are those who were planning for offering free gift to regular customers at certain intervals to be the future promotional strategies of Ethiopian coffee exporters (Table 4.28).

Table 4.28: Export promotional strategies of Ethiopian coffee exporters

Export promotional strategies of Ethiopian coffee exporters	Frequency			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing Value (%)
Providing special offer to international customers	64.3	14.3	14.3	7.1
Offering coffee for new customer for user trial	64.3	28.6	7.1	0
Offering direct mailing promotion to the international customers	35.7	14.3	42.9	7.1
Offering leaflet/pamphlet/poster about the product(Coffee)	57.1	21.4	21.4	0
Offering free gift to regular customers at certain intervals	21.4	21.4	57.1	0
Taking initiative to arrange extraordinary events to promote Ethiopian coffee at the international market	50	7.1	35.7	7.1
Participating on different business-expo by representing the company	78.6	14.3	7.1	0
Providing incentive to certified coffee suppliers (growers)	14.3	35.7	42.9	7.1
Deliberate featuring of Ethiopian coffee (brand) in film or Television programme	7.1	7.1	78.6	7.1

Source: Primary data collected from Ethiopian coffee exporters,2014
NB: N=14

Eventually, respondents were asked to indicate whether there were any institutions in Ethiopia promoting Ethiopian coffee in the international market. Accordingly, only 35.71 percent of the respondents said that there were no institutions responsible for promoting Ethiopian coffee in the international market. While, 64.29 percent of them said that there were organizations promoting Ethiopian coffee in the international market. The following are among the institutions which promotes Ethiopian coffee in the international market:

- Coffee & Tea Authority, Ministry of Trade, Ethiopian Exporters Association,
- Ethiopian Fine Coffee (supported by USAID and ACDI/VOCA)
- Ministry of foreign affair(through Ethiopian Embassies)
- ECEA in collaboration with WAFA, GM Loses by helping exporters to attend on international coffee exhibitions and trade fairs

4.3.7.2. Export distribution (place) strategies of Ethiopian coffee exporters

Exporters were asked to express their opinions on different issues related to export distribution (place) strategies of Ethiopian coffee exporters. More than three-fourth (78.6 percent) of the respondents affirmed that reaching customers via their mail order followed by meeting customers demand without compromising quality throughout the supply chain by using appropriate logistics and inventory system (57.1 percent), distributing using wholesaler (57.1 percent), and providing sufficient information about the product on the company's website to the customers (57.1 percent) were found as the major export distribution (place) strategies of Ethiopian coffee exporters. However, 35.7 percent of the respondents were planning to use better channel coverage than other coffee exporter countries as the future export distribution (place) strategies of Ethiopian coffee exporters (Table 4.29).

Table 4.29: Export distribution (place) strategies of Ethiopian coffee exporters

Export distribution (place) strategies of Ethiopian coffee exporters	**Frequency**			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing Value (%)
Reaching customers via their mail order	78.6	7.1	14.3	0
Using better channel coverage than other coffee exporters.	50	14.3	35.7	0
Not compromising the quality of coffee throughout the supply chain by using appropriate logistics and inventory system.	57.1	21.4	14.3	7.1
Providing sufficient information about the product on the company's website (online).	57.1	7.1	21.4	14.3
Distributing products using channel of mail order	50	14.3	21.4	14.3
Distributing products using retailer channels	21.4	28.6	21.4	28.6
Distributing products using internet (online application)	42.9	7.1	21.4	28.6
Distributing products using wholesalers	57.1	7.1	21.4	14.3

Source: Primary data collected from Ethiopian coffee exporters,2014
NB: N= 14

Respondents were further asked contingency question to indicate the distribution channels in which the exportable coffee is being sold. Accordingly, 42.8 percent of the respondents affirmed that they were selling their product for more than one distribution channels. While,

57.1percent of the respondents said that they are selling their product to export agents at the international market, 42.9 percent of them to Multi-National Companies (MNC), 42.9 percent of them to coffee processers and four of them to retailers.

4.3.7.3. Export product strategies of Ethiopian coffee exporters

The results from the Table 4.30 indicate that 71.4 percent of the respondents indicated that the variety of coffee produced in Ethiopia is the preferable variety in the international market.

Table 4.30: Export product strategies of Ethiopian coffee exporters

Export product strategies of Ethiopian coffee exporters	Frequency			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing value (%)
The variety of coffee produced in Ethiopia is preferable variety in the international market	71.4	14.3	0	14.3
Preferred supplier system	35.7	21.4	28.6	14.3
Offering certified organic coffee	42.9	14.3	42.9	0
Offering specialty coffee	71.4	7.1	21.4	0
Offering high quality coffee better than other coffee exporter countries	50	7.1	21.4	21.4
The brand of Ethiopia coffee is highly acceptable at the international market better than competitors' brand.	71.4	7.1	21.4	0
The contents of the packaging and design of coffee exported from Ethiopia complies with the culture, need and customs of international customers	50	42.9	7.1	0
Offering fair trade coffee	50	42.9	7.1	0

Source: Primary data collected from Ethiopian coffee exporters,2014

NB: Figures in brackets indicates percentage of the frequency of the response

The same number (71.4 percent) of respondents affirmed that offering specialty coffee and maintaining the good image of the brand of Ethiopia coffee at the international market better than competing coffee exporters brand were found as the major export product strategies implemented by Ethiopian coffee exporters. However, about 42.9 percent of the respondents were further confirmed that they were planning to offer certified organic coffee as the future export product strategies of Ethiopian coffee exporters while the same number (42.9 percent) of respondents were already implemented offering of certified organic coffee (Table 4.30).

4.3.7.3.1.Major deficiencies reducing the quality of Ethiopian coffee at the export markets

Respondents were asked to indicate the major deficiencies which seriously reduce the quality of exportable Ethiopian coffee. Accordingly, the following major deficiencies which might seriously affect the quality of exportable Ethiopian coffee were identified:

- Lack of modern agricultural inputs other than fertilizers,
- Increasing number of contraband businesses,
- Poor post-harvesting methods mainly the handling and processing practices,
- Poor farm practice,
- Poor inventory and logistics system viz., processing, packaging and handling, transportation and warehousing,
- Lack of training for farmers and exporters,
- Less involvement of specialist along with the coffee farmer (growers) during growing, and harvesting of the coffee plantation,
- During harvest season coffee growers are not picking the right cherries for export,
- During post-harvest season the use of improper storage,
- Poor handling and packaging of different origins of coffee,
- Sometimes there is lack of transparency particularly in the transferring of coffee from ECX warehouse to the exporters.
- Suppliers (coffee growers) are not quality conscious during post-harvest stage (hand picking) and blending the same quality of coffee,
- Lack of training to the coffee farmers and the price paid to the grower is also less,
- Quality can be reduced in semi-processing of coffee starting from hand picking to washing if it is not done properly and
- Less attention has been given for the prevention of indigenous breeds and introducing of new breeds.

4.3.7.3.2. Ethiopian coffee industry from value added products of coffee perspective

To identify the percentage of value added coffee exporters (among the respondents), respondents were asked to indicate whether they are providing value addition to processed coffee in international market. Majority (78.6 percent) of them affirmed that they were not

providing value added processed coffee in the export market while, only, 21.4 percent of them were providing value added processed coffee in the export market

The respondents were further asked to indicate whether they are providing value addition processed coffee to local market. Results indicate that only 14.28 percent of the respondents were providing value added processed coffee to local market while, 85.71 percent of them were not providing value added processed coffee to local market. Accordingly, in the present study, respondents were given a room to identify the major challenges to provide value added processed coffee to the domestic and international markets. The following are the major inhibiting challenges for Ethiopian coffee exporters to provide value added processed coffee to the domestic and international markets.

- Need to have export partner from Ethiopian coffee consumer countries,
- Coffee processing technologies and the required skill and knowledge of value addition of coffee,
- Lack of finance to provide value added products of coffee with the required processing technology at competitive price,
- Since coffee roasting is being dominated by the Western countries, soluble coffee can be a greater challenge for Ethiopian coffee exporters to be competitive enough from other value added coffee exporter countries,
- There is lack of policy that would encourage stakeholders to penetrate the value added products of coffee export market,
- Price competitiveness of international market and quality of coffee for value addition,
- Exporters were not interested in coffee roasting and grinding business so far since value added products of coffee is not in practice,
- The existing export policy allow to export raw coffee with jute bags as a packaging material, exporters can't use better packaging materials. Consequently this affects the interests of exporters to move from exporting of raw coffee to value added products of coffee.

4.3.7.4. Export pricing strategies of Ethiopian coffee exporters

The respondents were asked to indicate the export pricing strategies of Ethiopian coffee export firms. 78.6 percent of the respondents affirmed that offering premium price was found as the most practically implemented export pricing strategies by Ethiopian coffee exporters. However, 57.1 percent of the respondents were planning to offer credit term to the customer

as the future export pricing strategies of Ethiopian coffee exporters (Table 4.31). It can be inferred from the Table 4.31 that there is a better prospects for Ethiopian coffee to be categorised as the world premium coffee group in the international market, if they can supply premium coffee with premium pricing strategy.

Table 4.31: Export pricing strategies of Ethiopian coffee exporters

Export pricing strategies of Ethiopian coffee exporters	Frequency			
	Being done (%)	Done but not now (%)	Planning in future (%)	Missing Value (%)
Offering least price	57.1	14.3	21.4	7.1
Offering off price	21.4	28.4	21.4	28.6
Offering discount price	35.7	14.3	35.7	14.3
Offering credit term	7.1	14.3	57.1	21.4
Offering premium price	78.6	14.3	7.1	0

Source: Primary data collected from Ethiopian coffee exporters, 2014
NB: N=14

Additionally, respondents were asked to share their pricing strategy for the different quality of coffee supplied by coffee growers. Majority (71.43 %) of the respondent said that they were recognizing the quality of coffee supplied by the coffee growers by paying higher price for better quality. However, 28.57 percent of the respondents confirmed that they were not recognizing the quality of coffee through better price; this is mainly because exporters have no option to buy from coffee growers other than in the ECX trading floor.

4.3.7.5. Ethiopian coffee export market positioning strategy

Respondents were asked to compare their marketing efforts made to position the brand of Ethiopian coffee in the international customers mind against other competing coffee exporter countries. The result indicates that half of the respondents affirmed that they were supplying better quality product and also little less than half 42.9 percent of them positioned in supplying better pricing strategy than competing coffee exporter countries. Majority (64.3 %) of the respondents affirmed that Ethiopian coffee exporters are as good as competing coffee exporter countries in their product positioning strategy followed by 42.9 percent and 35.7 percent in product positioning strategy and promotional strategy, respectively. However, 35.7 percent of the respondents and 57.1 percent of the respondents confirmed that Ethiopian coffee exporters were not as good as competing coffee exporters in the existing export distribution strategy and export market segmentation strategies, respectively (Table 4.32). Therefore, the distribution strategy and export market segmentation strategy of the Ethiopian

export market should be the priority area of policy makers from the development of market infrastructural network given the condition that the country is landlocked.

Table 4.32: Marketing efforts made to position the brand of Ethiopian coffee in the international customers mind

Brand positioning effort	Frequency				
	Not as good as competing coffee exporters (%)	As good as competing coffee exporters (%)	Better than competing coffee exporters (%)	Do not know (%)	Missing value (%)
Pricing strategy	14.3	28.6	42.9	14.3	0
Product quality	7.1	35.7	50	0	7.1
Distribution strategy	35.7	21.4	28.6	7.1	7.1
Promotional strategy	28.6	35.7	21.4	7.1	7.1
Export market segmentation strategy	57.1	28.6	7.1	7.1	0
Export market targeting	7.1	64.3	4.3	7.1	7.1
Product positioning strategy	7.1	42.9	28.6	14.3	0

Source: Primary data collected from Ethiopian coffee exporters, 2014
NB: N=14

Result from Table 4.32 indicates that that respondents were asked to indicate the marketing strategies employed to build the brand of Ethiopian coffee in the international customer mind. Accordingly, the result indicates that the total (100 percent) of the respondents unanimously affirmed that they were providing complete details of their coffee products as marketing strategy to build the brand of Ethiopian coffee in the international customer mind.

4.3.7.6. Ethiopian coffee brand image building strategies

Among the major marketing strategies employed to build the brand image position of Ethiopian coffee in the international customer mind, result shown in Table 4.33 indicates that 92.9 percent of the respondents were participated in trade shows and exhibitions and 85.7 percent of them indicated that effort was made to create a good impression on tourists about Ethiopia.

Table 4.33: Marketing strategies employed to build the brand image of Ethiopian coffee in the international customer mind

Strategies to build the brand of Ethiopian coffee in the international customer mind	Frequency		
	Yes (%)	No (%)	Missing value (%)
Media coverage given to Ethiopian coffee market by the world press and television is high	7.1	92.9	0
The role of Ethiopian Exporters Association to introduce Ethiopian coffee at the international market is high	21.4	78.6	0
The occurrence of extraordinary events which may affect international perceptions of the country is high.	50	42.9	7.1
Tourists from other countries have a good impression about Ethiopia from their personal experience.	85.7	14.3	0
Ethiopian exporters are linked with multinational companies to facilitate their marketing effort	64.3	28.6	7.1
Does your company have participated on a trade show?	92.9	7.1	0
Does your company have complete details of the products you are selling?	100	0	0
Does your company have indicative price lists, photographs or actual products where feasible at a trade show?	78.6	14.3	7.1
Does your company have a person who knows two or more major foreign languages during the trade show, to translate for prospective customers?	71.4	21.4	7.1

Source: Primary data collected from Ethiopian coffee exporters, 2014
NB: N=14

Whereas, 71.4 percent of the respondents affirmed that they have a person who knows two or more major foreign language that would help to translate for prospective customers in the trade shows, followed by 64.3 percent of them were linked with multinational companies to facilitate their marketing efforts. However, 92.9 percent of the respondents affirmed that no marketing effort was made to build the brand of Ethiopian coffee in the international customer mind through giving media coverage to Ethiopian coffee in the world press and television. Similarly, 78.6 percent of the respondents indicated that the Ethiopian Exporters Association did not play significant role in introducing and building the brand of Ethiopian coffee to the international market. However, 42.9 percent of the respondent confirmed the non- occurrence of extraordinary events which may affect international perceptions of the country in building the brand of Ethiopian coffee in the international customer mind (Table 4.33).

4.3.7.7. Competitive advantage of Ethiopian coffee exporters

Table 4.34 indicates that respondents were asked to compare the competitive advantage of Ethiopian coffee exporters against other competing coffee exporter countries.

Table 4.34: Competitive advantage of Ethiopian coffee exporters

Competitive advantages of Ethiopian coffee Exporters	Frequency			
	Not as good as competing coffee exporters (%)	As good as competing coffee exporters (%)	Better than competing coffee exporters (%)	Missing value (%)
Product quality	14.3	42.9	42.9	0
Product variety	57.1	42.9	0	0
Product technology for value addition	14.3	50.0	36.7	0
Product flavour and taste	14.3	57.1	28.6	0
Marketing information collection	14.3	36.7	50.0	0
Pricing of the products	14.3	50.0	36.7	0
Advertising and sales promotion	14.3	57.1	21.4	7.1
Brand image of Ethiopian coffee	21.4	78.6	0	0
Packaging	21.4	78.6	0	0
Distribution coordination	14.3	50.0	36.7	0
Transportation facilities	28.6	28.6	42.9	
Communication facilities	21.4	50.0	28.6	0
Customer credit facilities	57.1	36.7	7.1	0
Customer relationship	7.1	64.3	28.6	0
Efficient supply chain	28.6	36.7	36.7	0
Compliance of export orders effectively	14.3	50.0	36.7	0

Source: Primary data collected from Ethiopian coffee exporters, 2014
NB: N=14

The result indicates that 50 percent of the respondents confirmed that Ethiopian coffee exporters have better competitive advantage against competing other coffee exporters in collecting of market information followed by competitive advantage in product quality 42.9 percent and 42.9 percent their strength on market transportation facilities better than competing coffee exporter countries.

The result was in line with the argument which was made by Cavusgil and Zou (1994), the properties and uniqueness of a product can have an influence on its competitive positioning as well as the ability to enter a new market.

More than three-fourth (78.6 percent) of the respondents noted that Ethiopian coffee exporters have a competitive advantage as good as other competing coffee exporter countries in brand image, packaging, and 64.3 percent of them in customer relationship. Whereas, 57.1 percent of the respondents in product flavour and taste and 57.1 percent of them affirmed that Ethiopian coffee exporters are as good as other competing coffee exporter countries in advertising and sales promotion.

However, Majority (57.1 percent) of the respondents confirmed that the competitive advantage of Ethiopian coffee exporters were found as not good as competing coffee exporters in the supply of product variety and credit facilities to customers. Whereas, 28.6 percent of them also affirmed that both transportation facilities and employment of efficient supply chain in the export marketing of coffee were found as not good as competitors of Ethiopian coffee exporters.

Similarly, no single respondent was confident enough to confirm that Ethiopian coffee exporters have a better competitive advantage against other competing coffee exporting countries in product variety, brand image and packaging (Table 4.34). This might be due to the fact that Ethiopia is mainly the producer of Coffee Arabica and exporters are supposed to use long distance multimodal transportation facility due to the port (Djibouti port) distance from the location of major exporters in the country, which is mainly Addis Ababa.

From this, it is inferred that further marketing effort is necessary by both the coffee exporters and stakeholders of the coffee industry to increase the competitive advantage of Ethiopian coffee exporters in product variety, building brand image and packaging. In this regard, the option might be allowing private coffee exporters to use their own packaging design by considering the national level package design content in to account. Additionally, there should be Coffee Arabica breeder specialist to come up with a variety of coffee which can satisfy the test and preference of international customer at the different parts of the world.

4.3.7.8. The strategic position of Ethiopian coffee exporting firms

In Table 4.35, respondents were given different variables to indicate the strategic position of Ethiopian coffee export firms. Accordingly, all (100 %) respondents confirmed that Ethiopian coffee exporting firms have an international marketing plan with defined goals and strategies and also have adequate knowledge of export payment mechanisms such as developing and negotiating letters of credit.

Table 4.35: The strategic position of Ethiopian coffee export firms

The strategic position of Ethiopian coffee export firms	Frequency		
	Yes (%)	No (%)	Missing value (%)
Does your company have a coffee (product) that has been successfully sold in the domestic market?	42.9	57.1	0
Is your company preparing for international marketing plan with defined goals and strategies?	100	0	0
Does your company have sufficient supply (production) capacity that can be committed to the export market?	85.7	14.3	0
Does your company have the financial resources to actively support the marketing of your products in the targeted overseas markets?	92.9	7.1	0
Is your company's management committed to develop export markets and willing and able to dedicate staff, time and resources to the process?	92.9	7.1	0
Is your company committed to provide the same level of product given to your domestic customers?	42.9	50	7.1
Does your company have adequate knowledge of modifying product packages and its content to meet foreign import regulations and cultural preferences?	50	42.9	7.1
Does your company have adequate knowledge of shipping its product overseas (such as identifying and selecting international freight forwarders and freight costing)?	85.7	14.3	0
Does your company have adequate knowledge of export payment mechanisms, such as developing and negotiating letters of credit?	100	0	0

Source: Primary data collected from Ethiopian coffee exporters, 2014
NB: N=14

Majority (92.9 %) of the respondents indicated that Ethiopian coffee exporting firms have enough financial resources to actively support their export marketing effort and have managements who are committed to develop export markets by devoting the necessary resources. Whereas, 85.7 percent of them confirmed that they have adequate knowledge of shipments of products to overseas, such as identifying and selecting international freight

forwarders and freight costing and also have sufficient supply capacity that can be committed to the export market.

However, 57.1 percent of the respondents affirmed that their export firms were not having coffee (product) that has been successfully sold in the domestic market. Similarly, 50 percent of the respondents and 42.9 percent of the respondents also confirmed that their export firms were not committed to provide the same level of product supplied to the domestic customers. Additionally, 42.9 percent of the respondents were confirmed that their export firms were not having adequate knowledge of modifying product's package and its content to meet foreign import regulations and cultural preferences.

It is further suggested that to improve the strategic position of Ethiopian coffee in the international market, coffee export firms need to have the experience of satisfying the domestic market to extend the same or better level of commitment to the international customers with adequate knowledge of modifying product packages and its content to meet foreign market import regulations and cultural preferences. The result is consistent with the argument which was made by Rogers (1983), when cultures are similar, exporters may learn from their experience in their home markets and accelerate the innovation acceptance in the export market.

4.3.7.9. Marketing strategies to improve export competitiveness of Ethiopian coffee exporters

Respondents were asked to identify marketing strategies for the Ethiopian coffee industry to improve competitiveness in the international market. Accordingly, the following strategies were identified.

- Supply chain must be short and uncontrolled participants in the system should be removed.
- Private quality inspection institute has to be developed
- Producing quality coffee through appropriate pre and post-harvest system and Certification, and also there should be quality preservation (steadiness)
- Ethiopian coffee should follow the international market price
- Employing intensive and effective generic promotion of Ethiopian coffee is necessary
- Effective export facilitating system and logistics should be streamlined

- Providing training on the knowledge of international trade to coffee exporters
- There should be well organized warehouse management and also improve their operation
- Providing technical and managerial support for exporters to enable them to handle the export process effectively
- Coffee exporter firms should be equipped with educated persons to handle the export operation effectively
- To command the perception of international consumers on the brand of Ethiopian coffee, coffee exported from Ethiopia should be zero defect and with best cup quality
- Timely shipment of purchase order by maintaining quality of sample shipment
- Need of paying more attention to production of quality coffee at the same time increase in the volume of production at growers level and providing daily detail of international market information and analysing the situation (market intelligence service) to take immediate action in all level of the stakeholders at the ECX
- Introducing Ethiopian coffee to the different parts of the world through Ethiopian embassy. For example Chinese they usually drink green tea however, recently a coffee cup test was made in China. Similarly, this best practice should be extended in all Ethiopian coffee export destinations and
- Continuous training has to be given to the farmers to keep the coffee quality and produce high volume.

Consequently, respondents were asked to express their view to what extent technical assistance has been provided to Ethiopian coffee exporters in the marketing process. Accordingly, 85.7 percent of the respondents affirmed that there is no technical assistance extended to Ethiopian coffee exporters in the marketing process of coffee. Whereas, only 14.3 percent of the respondents claimed that, technical assistance is being provided to Ethiopia coffee exporters. Respondents were further asked to indicate the type of technical assistance provided and only 14.3 percent of the respondents attended the training on trade, quality and risk management which was organized by the Ethiopian Exporters Association and Ministry of Trade.

In order to assess the export risk mitigation and risk of loss recovery mechanisms of Ethiopian coffee exporters in the export process; respondents were asked to detail their export firm status in the same regard. Accordingly, 92.85 percent of the respondents confirmed that their export firms are under insurance coverage. While, only 7.14 percent of the respondent

were not under insurance coverage and further expressed that there is no risk mitigation mechanism in practice.

Respondents were asked if there were systems which link exporters with smallholder farmers through contract farming, which would help to put mechanisms in place for coffee quality control in order to strengthen export sector. It was found that only 14.28 percent of the respondents said that there is such a system. However, majority (78.57 percent) of them affirmed that there is no such system to put mechanisms in place for coffee quality control in order to strengthen the export sector and 7.14 percent of the respondents didn't address the question.

4.3.7.10. Major challenges in the Ethiopian coffee exports supply chain

Respondents were asked to mention the major challenges which are being exhibited at the different stage of coffee export supply chain. Accordingly, the following are major challenges which are being faced by the Ethiopian coffee exporters at different stages of coffee export supply chains

a) **Challenges from coffee grower to coffee exporters**
   - There is no direct business relationship between coffee exporters with coffee growers, since the coffee market is regulated by the ECX. As a result suppliers are price makers since exporters are buying from the ECX, there is no room for the coffee exporters to deal and bargain with coffee supplier.
   - Difficulty in traceability
   - Most of the time the local market (ECX) price doesn't go with international market price; the ECX price is always higher.
   - Exporters can get coffee through middle men that makes the price to be high to compete in the in the international market.
   - Few respondents also mentioned from the positive side of the export market supply chain by stating the coffee market is regulated by the ECX and exporters can only take the required coffee from the ECX warehouse, therefore it is problem free at this channel.

b) **Major challenges from coffee exporters to coffee export agents**
   - Huge number of brokers in coffee consuming countries
   - In some coffee importing countries political instability affect the export

- Failing to abide with the honour contracts between coffee exporters and export agents
- Failing to provide timely information for exporters (challenge of communication channels)
- Sometimes there is shipment delay which might result in cancellation of contract
- The existence of unnecessary competition between the exporters as well as export agents
- Existence of loss of weight and quality as well as inconsistency in the process.
- Sometimes the demanded type of coffee will be out of the stock and need to wait until we provide the complete requirement of the buyer that might result in delay of order.
- There is challenges of logistics

c) Major challenges from exporters to the international market (final consumers)

- Challenge of getting information regarding the requirement of prospective buyers demand in terms of type and quality standard.
- Less participation of exporters in international coffee exhibition at different countries is one of the challenges for Ethiopian coffee exporters to meet and understand the test and preference of Ethiopian coffee consumers.
- Logistics problems specially getting coffee containers from Addis Ababa and as well as from ports
- Difference in working day between Ethiopia and Djibouti (port) is also one of the factors affecting delivery time.
- Existence of bureaucracy resulting from the existence of too many government offices handling the export process.
- Existence of price fluctuation in the international market which would lead exporters to commit export decision without appropriate market information.

In addition to the above export firm's level marketing challenges in the coffee export supply chain respondents further identified the following major export sector level challenges exhibited in the marketing of Ethiopian coffee.

- Flexibility and continuous change in export policy of the country;
- Difficulty in identifying prospective buyers and roasters;

- Less marketing effort (promotional effort) on awareness creation about Ethiopian Coffee through international media;
- Less national level scheme to support coffee exporters;
- Language barrier in the different export destinations
- High transportation cost from interior and to the port. Similarly, transportation challenge from ECX warehouse to exporters;
- The price at ECX is higher or equivalent to the export price;
- High operational cost and;
- Long waiting time in receiving coffee at the ECX warehouse
- Quality of coffee is being compromised especially from exportable coffee supplier to exporters in the trading process. Respondents further noted the issue as " the sample coffee which is being provided in the ECX trading floor sometimes will not be given to the exporters at the warehouse due to lack of service transparency particularly in the stage of transferring the traded coffee from the ECX warehouse to the exporters"
- Conclusively, attempt were made to understand the existing coffee export marketing strategies and design the future coffee export marketing strategies for Indian and Ethiopian coffee exporters from the four marketing mix dimensions. Furthermore, the export market positioning strategies, brand image building strategies and the coffee export competitive advantages of the two countries and challenges exhibited in the coffee export market in India and Ethiopia were identified.

Accordingly, the existing and future coffee export marketing strategies for Indian coffee exporters are:

From the Indian coffee exporters' perspective the export promotional strategies include providing leaflet, pamphlet, poster about their product (coffee) and also offering direct mailing promotion to international customers, participating in different business-exhibition by representing their company and taking initiative to arrange extraordinary events to promote Indian coffee at the international market are presently being implemented as promotional strategies of Indian coffee exporters. Whereas, featuring of Indian coffee (brand) in film or television program, offering direct mailing promotion and offering coffee for new

customer for user trial are being suggested as the future export promotional strategies of Indian coffee exporters.

With regard to export distribution strategies of Indian coffee exporters reaching customers via their mail order, meeting customers demand without compromising the quality of coffee throughout the market supply chain by using appropriate logistics and inventory system, distributing product through wholesaler, using channel of mail order and providing sufficient information about product on company's website were found as the existing export distribution strategies of Indian coffee exporters. However, distributing products using retail channel and employing online application for receiving purchase order and related export transaction were found to be the future export distribution strategies of Indian coffee exporters.

Concerning the export product strategies, supplying preferable coffee variety, supplying specialty coffee, supplying fair trade coffee and being preferred supplier system, compliance in the contents of the product packaging and design of coffee exported from India with the culture, need and customs of international customer and building acceptable brand image of Indian coffee were found as the current export product marketing strategies of Indian coffee exporters. Keeping the existing export product strategies in to account supplying of Certified organic coffee found to be the future export product marketing strategies of Indian coffee exporters.

Following premium pricing, offering credit term to the customers, paying higher price for better quality of coffee supplier (coffee growers) or growing better quality by the coffee exporting firms were found as the current and future export pricing strategies of Indian coffee exporters

Employing better export market targeting, better product positioning strategy, providing quality of coffee better than other coffee exporter countries were found as marketing efforts made to position the brand of Indian coffee in the international customers mind.

Creating a good impression about the country in the tourists mind coming from different countries, providing complete details of their products which are being sold, participation on trade show and providing indicative price lists, photographs or actual products to show at a trade show, introducing Indian coffee at the international market through export promotion agency and the high occurrence of extraordinary events which may affect international perceptions of the country's product were found as the major marketing strategies employed to build the brand of Indian coffee in the international customer mind. Whereas, giving media

coverage to Indian coffee in the world press and television, employing a person who knows two or more major foreign languages during the trade show to translate for prospective customers and linking Indian coffee explorers with multi-national companies to facilitate their marketing effort were found as some of the areas to be done in the future to build the brand of Indian coffee in the international customer mind.

Indian coffee exporters were found in a better competitive advantage in collecting market information, in their product variety, efficient supply chain and brand image of Indian coffee in the export market.

The strategic position of Indian coffee export firms found with management, committed to develop export market and willing and able to dedicate staff, time and resources to the export process. Additionally, the export firms are committed to provide quality product supplied to their domestic customers with sufficient financial resources and supply capacity to actively support their marketing effort in the targeted overseas markets and preparing for international marketing with defined goals and strategies. Furthermore, the export firms are equipped with adequate knowledge concerning the shipment of their product overseas, export payment mechanisms, modifying product packaging and contents to meet foreign import regulations and cultural preferences.

Export marketing strategies identified to improve the competitiveness Indian coffee exporters in the export market are organizing coffee exporters conference, provide financial incentives for coffee exporters for procuring quality coffee, providing more up-to-date market intelligence service, coordinating and allowing coffee exporters to using export containers on sharing basis that would help exporters to reduce their operational cost, organizing coffee expo in India, arranging coffee expo visit for Indian coffee exporters in different countries, organizing awareness creation program on the importance of coffee quality for all stakeholders throughout the coffee supply chain and promotion of quality as a product positioning theme for Indian coffee and increasing the publicity of Indian coffee through different mass media.

The existing and future coffee export marketing strategies of Ethiopia include:

- Participation of exporters in different business-expo in representing the export firms, providing special offer to international customer and offering coffee for new customer for user trial were found as the existing promotional strategies of Ethiopian coffee exporters. However, deliberate featuring of the brand of Ethiopian coffee in films or

television programs, offering free gift to regular customers at certain intervals were found to be the future promotional strategies of Ethiopian coffee exporters.

- Reaching customers via their mail order, meeting customers demand without compromising quality throughout the supply chain by using appropriate logistics and inventory system, distributing using wholesaler and export agents; and providing sufficient information about the product on the company's website to the customer were found as the major export distributions strategies of Ethiopian coffee exporters. Using better distribution channel coverage than other coffee exporter countries was found to be the future export distributions (place) strategies of Ethiopian coffee exporters.
- Providing preferable variety of coffee produced in Ethiopia, offering specialty coffee and maintaining the good image of the brand of Ethiopia coffee at the international market were found as the major export product strategies implemented by Ethiopian coffee exporters. However, offering certified organic coffee was found as the existing and future export product strategies of Ethiopian coffee exporters.
- Following premium pricing strategy and paying higher price for better quality coffee growers were found as the most practically implemented export pricing strategies by Ethiopian coffee exporters. However, offering credit term to the customer was found to be the future export pricing strategies of Ethiopian coffee exporters.
- Supplying quality coffee at the right price better than competing coffee exporter countries and employing better product positioning and promotional strategies were found as marketing efforts made to position the brand of Ethiopian coffee in the international customers mind.
- Participating in trade shows and exhibitions and creating a good impression on tourists about Ethiopia, employing a person who knows two or more major foreign languages that would help to translate for prospective customers in the trade shows, linked with multi-national companies to facilitate their marketing efforts were found efforts made to build the brand image of Ethiopian coffee of Ethiopian coffee in the international customer mind.
- Ethiopian coffee exporters have better competitive advantage against competing coffee exporters in collecting of market information, product quality and their strength on export market logistic facilities. Furthermore, they have competitive advantage in brand image, packaging, customer relationship, product flavor and taste, and advertising and sales promotion.

- The strategic position of Ethiopian coffee export firms found with management committed to develop export market and willing and able to dedicate the required number of staff, time and resources to the export process. Additionally, the export firms have sufficient financial resources and supply capacity to actively support their marketing effort in the targeted overseas markets and preparing for international marketing with defined goals and strategies. Furthermore, the export firms are equipped with adequate knowledge concerning the shipment of their product overseas, export payment mechanisms.
- Marketing strategies to improve export competitiveness of Ethiopian coffee exporters as identified by the respondents of the present study include shortening the coffee supply chain, removing uncontrolled participants in the export marketing system, launching of private quality inspection institute, marinating quality throughout the supply chain, following international market price, employing intensive and effective generic promotion of Ethiopian coffee, streamlining effective export facilitating system and logistics, providing training on the knowledge of international trade to coffee exporters, creating well organized warehouse management and also improve their operation, providing technical and managerial support for exporters, coffee exporter firms should be equipped with educated person , providing zero defect and best cup quality coffee, compliance to purchase order, increasing supply without losing its quality and continuous training for farmers

Lessons Learned from Indian coffee export Industry

i. In order to stabilize the adverse impact of fluctuation in the prices on Indian coffee growers, which may be due to decline in the World coffee prices resulted in the collapse of the ICO quota system and the barter system Soviet Union (which had been a major importer of Indian coffee) producers questioned the efficacy of the Coffee Board and the marketing system. Subsequently, small and medium-sized coffee producers prompted to join forces with the United Planters' Association of South India (UPASI), which rightly believed that it had more political mileage to exert pressure on the Government; and to pursue liberalization. As a result, the Government of India was willing to liberalize the coffee market in 1992 and took the first step toward liberalizing its coffee market by introducing a 30 percent domestic sales quota

and the remaining 70 percent for auction by Coffee Board of India.

ii. The role of Coffee Board of India is to serve as the friend, philosopher and guide to the Coffee sector covering the entire value chain with primarily concern of research & development, transfer of technology, quality improvement, extending development support to growing sector, promotion of coffee in export and domestic markets with the aim of enhancement of production, productivity and quality, export promotion for achieving higher value returns for Indian Coffee and supporting development of domestic market.

iii. Recently, the GOI's effort in providing financial incentives to the Indian coffee exporters as a means of promoting Indian coffee brand in the international market and sale of coffee in important far off destinations (markets where traditionally Indian coffee was not exported). This marketing scheme come in to action by providing incentives of Rs 1/kg for export of high value coffee to the far off destinations viz., USA, Canada, Japan, Australia and New Zealand. Similarly, providing incentives of Rs. 2/kg for export of value added coffee in retail packs of less than 500 grams as Indian brand. This will help the sector to diversify export of green coffee and value added products of coffee.

Lessons Learned from Ethiopian coffee export Industry

i. The Government of Ethiopia's effort to create bilateral trade agreement with many of the world coffee consuming countries helped the country to rank among the top ten coffee exporter countries despite the Ethiopia is not the member of World Trade Organization (WTO).

ii. Coffee cooperative unions are licensed to bypass the coffee auction at the ECX and can export their coffee directly. After the implementation of Agricultural Cooperatives in Ethiopia (ACE) project, the government of Ethiopia removed the requirement for cooperatives to sell all coffee through the national auction which opened the way for direct export sales. ACDI/VOCA recognized the importance of this policy change, as well as the inability of the coffee cooperatives to take advantage of the reform, and developed and applied a value-chain approach to address the constraints at each level of the industry. Within this overall approach, an emphasis

was placed on strengthening the cooperation between small scale producers, as well as establishing secondary cooperatives or "unions" to achieve the economies of scale needed to reach international markets. Thus, the project supported the establishment of secondary level unions, expanded farmers' access to purchasing and distribution, aided the Oromia, Sidama, Yergacheffe and Kafa Coffee Farmers' Cooperative Unions as groundbreaking initiative by getting permission from the government to bypass the central coffee auction and act as direct exporters on behalf of their members.

iii. Following the establishment of the ECX, the license for private coffee traders is no longer in existence and an effort has been made to remove private traders from the market chain. The wholesaler is supposed to collect the coffee directly from the farmers, thus eliminating one level from the chain.

SUMMARY AND CONCLUSION

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

In this study attempts were made to examine and design the coffee export marketing strategies of India and Ethiopia with the following specific objectives:

i. analysing the trend and composition of coffee exports of India and Ethiopia;

ii. identifying major determinants of coffee export in India and Ethiopia

iii. examining coffee export marketing strategies of India and Ethiopia and Suggesting appropriate coffee export marketing strategies for both countries based on the result generated.

Both primary and secondary sources of data were employed for the study in order to meet the above objectives. Among the total coffee exporters from India and Ethiopia, 20 percent were taken as total sample size of the study and samples were drawn using simple random sampling technique. Primary data were collected using questionnaire from exporters and additionally unstructured open ended interviews were made with Secretary Coffee Board of India and Ethiopian Commodity Exchange, Chief strategic officer to triangulate the result. Additionally, time series secondary data were collected from different authenticated sources like ICO, World Bank, Coffee Board of India, and the Observatory of Economic Complexity from the year 1980-2010 (year's deeds for different variables).

Analytical models such as exponential compound annual growth rate, coefficient of variation, ARCH, GARCH, Johanson Cointegration model, market share and market growth model, Herfindahl–Hirschman Index, Markove Chain Model of transitional probability matrix, Kendall's W. Coefficient of Concordance and simple descriptive statistics such as percentage models were computed to analyses the data. Economic Views, Lingo Programming, Statistical package for Social Sciences, and Advanced Excel computer packages were used to generate results. Accordingly, objective wise summary of major findings is presented below.

Firstly, attempts were made to examine trend and composition of coffee export marketing in India and Ethiopia particularly, the trend in production, domestic consumption, exports, prices paid to coffee growers from 1980-2010. Accordingly, the present study found that:

The Indian coffee sector witnessed significant positive incremental growth in production, domestic consumption, export and prices paid to coffee growers throughout the study period. However, the incremental growth noted during pre-liberalization period was not significant. On the other hand, with the exception of a negative incremental growth noted in the production and export volume of coffee from 1980-1990, the Ethiopian coffee sector witnessed a positive incremental growth in production, domestic consumption, export and prices paid to coffee growers throughout the study period (1980-2010).

The increase in the volume of coffee production in India directly reflected in the rise or drop in the volume of coffee export and domestic consumption during pre-liberalization period. However, the volume of coffee production did not reflect on the rise or drop in the volume of domestic consumption of coffee during post-liberalization period. On the other hand, the increase in production of coffee in Ethiopia reflected in the rise or drop of export while, the volume of domestic consumption of coffee was found independent of production almost throughout the study period.

Furthermore, based on trend in country wise exports, Others, Italy and Russian Federation export target market of Indian coffee and Germany and USA export target market of Ethiopian coffee were found the most stable market with high retention potential. Whereas, Japan and Germany export target markets for Indian coffee and France and Others export target markets for Ethiopian coffee were found the most unstable market.

With the exception of Russian Federation, USA and Japan markets among the major Indian coffee export destinations and USA market among the major Ethiopian coffee export destinations, the growth in the exports of coffee witnessed a positive and significant incremental growth for the study period.

Based on the market concentration analysis, it was found that there is perfect competition in Italy, Germany, USA and Japan markets for Indian coffee exporters and there is a perfect competition in France, Saudi Arabia, USA, and Japan markets for Ethiopian coffee exporters. Whereas, Indian coffee exporters are monopoly in Russian Federation and Other export target markets of India coffee. Similarly, Ethiopian coffee exporters are monopoly suppliers in

Germany and Others export target markets of Ethiopian coffee with relatively low competition.

Secondly, attempts were made to identify the determinants of coffee exports from India and Ethiopia. Five major variables Viz, Legal and political, Socio-cultural, geographic, economic, and competitive environmental factors were taken in to account to examine and identify the major influential factors determining coffee export marketing in the two countries. Accordingly, the present study found that:

The support made by the Government of India to promote coffee exporters, the educational background of the management of Indian coffee export firms, the geographic location where coffee is being grown, the proximity of coffee export firms to major ports, transportation and labour cost and the existence of high demand of coffee in the domestic market were found as the major determinants of export marketing of coffee in India taking the legal and political, socio-cultural, geographic, economic and competitive environmental factors in to account.

Whereas, export and import duty protection imposed by the government of Ethiopia , the educational background of the management of Ethiopian coffee export firms, the geographic location where coffee is being grown, the fluctuations in the currency rate between different countries and existing of strong competitors' strategy in the international market were found as the major determinants of export marketing of coffee in Ethiopia, taking the legal and political, socio-cultural, geographic, economic and competitive environmental factors in to account. However, the geographic location where coffee is being grown was found with highest mean rank in both countries being the major determinant variable of coffee export marketing in India and Ethiopia.

Attempts were made to understand the existing coffee export marketing strategies and design the future coffee export marketing strategies for Indian and Ethiopian coffee exporters from the four marketing mix dimensions. Furthermore, the export market positioning strategies, brand image building strategies and the coffee export competitive advantages of the two countries and challenges exhibited in the coffee export market in India and Ethiopia were identified.

Accordingly, the existing and future coffee export marketing strategies of India and Ethiopia are:

From export promotional strategies of Indian coffee exporters' perspective, providing leaflet, pamphlet, poster about their product (coffee) and also offering direct mailing promotion to international customers were found as strategies presently being implemented as promotional strategies of Indian coffee exporters. While, deliberate featuring of Indian coffee (brand) in films and/or television programs was found as the future export promotional strategies of Indian coffee exporters.

Participation of coffee exporters in different business-expo in representing the export firms and offering coffee for new customer for user trial were found as the existing promotional strategies of Ethiopian coffee exporters. However, deliberate featuring of the brand of Ethiopian coffee in the film and or television program, was found as the future promotional strategies of Ethiopian coffee exporters.

With regard to export distribution strategies of Indian coffee exporters; reaching customers via their mail order and meeting customers demand without compromising the quality of coffee throughout the market supply chain by using appropriate logistics were found as the existing export distribution strategies of Indian coffee exporters. However, employing online application for receiving purchase order and related export transaction was found as the future export distribution strategies of Indian coffee exporters.

Reaching customers via their mail order, meeting customers demand without compromising quality throughout the supply chain by using appropriate logistics and inventory system and distributing using wholesaler were found as the major export distributions strategies of Ethiopian coffee exporters. Using distribution channel coverage better than other coffee exporter countries was found as the future export distributions (place) strategies of Ethiopian coffee exporters.

Concerning the export product strategies, supplying preferable coffee variety and supplying specialty coffee were found as the current export product marketing strategies of Indian coffee exporters. Whereas, supplying certified organic coffee found as the future export product marketing strategies of Indian coffee exporters.

Providing preferable variety of coffee produced in Ethiopia, offering specialty coffee and maintaining the good image of the brand of Ethiopia coffee at the international market were found as the major export product strategies implemented by Ethiopian coffee exporters.

However, offering certified organic coffee was found as the existing and future export product strategies of Ethiopian coffee exporters.

Following premium pricing and offering credit term to the customers were found as the current and future export pricing strategy of Indian coffee exporters

Following premium pricing strategy and paying higher price for better quality coffee growers were found as the most practically implemented export pricing strategies by Ethiopian coffee exporters. However, offering credit term to the customer was found as the future export pricing strategies of Ethiopian coffee exporters.

Employing export market targeting better than other coffee exporter countries was found as area where marketing efforts were made to position the brand of Indian coffee in the international customers mind.

Supplying quality coffee at the right price better than competing coffee exporter countries was found as the areas where marketing efforts were made to position the brand of Ethiopian coffee in the international customers mind.

Creating a good impression about the country in the minds of tourists who are coming from different countries, providing complete details of their products which are being sold, participation on trade show, providing indicative price lists, photographs or actual products to show at a trade show, introducing Indian coffee at the international market through export promotion agency and the high occurrence of extraordinary events which may affect international perceptions of the country's product were found as the major marketing strategies employed to build the brand of Indian coffee in the international customer mind. Whereas, giving media coverage to Indian coffee in the World press and television programs, employing a person who knows two or more major foreign languages during the trade shows to translate for prospective customers and linking Indian coffee explorers with multi-national companies to facilitate their marketing effort were found as some of the areas to be done in the future to build the brand of Indian coffee in the international customer mind.

Providing complete details of products being sold by the Ethiopian coffee exporters and participating in trade shows and were found as the two major areas where marketing efforts were made to build the brand image of Ethiopian coffee in the international customer mind.

Indian coffee exporters were found in a better competitive advantage in collecting market information, in their product variety, efficient supply chain and brand image of Indian coffee in the export market.

Ethiopian coffee exporters have better competitive advantage against competing coffee exporters in collecting of market information and product quality.

The strategic position of Indian coffee export firms was found with management, committed to develop export market and willing and able to dedicate staff, time and resources to the export process. Additionally, the export firms are committed to provide quality product supplied to their domestic customers with sufficient financial resources and supply capacity to actively support their marketing effort in the targeted overseas markets and preparing for international marketing with defined goals and strategies. Furthermore, the export firms are equipped with adequate knowledge concerning the shipment of their product overseas, export payment mechanisms, modifying product packaging and contents to meet foreign import regulations and cultural preferences.

The strategic position of Ethiopian coffee export firms found with management, committed to develop export market and willing and able to dedicate staff, time and resources to the export process. Additionally, the export firms have sufficient financial resources and supply capacity to actively support their marketing effort in the targeted overseas markets and preparing for international marketing with defined goals and strategies. Furthermore, the export firms are equipped with adequate knowledge concerning the shipment of their product overseas and export payment mechanisms.

Marketing strategies required for the Indian coffee industry to improve their export competitiveness in the export market are organizing of coffee exporters conference, provide financial incentives for coffee exporters for procuring quality coffee, providing more up-to-date market intelligence service, coordinating and allowing coffee exporters to using export containers on sharing basis to reduce their operational cost, organizing coffee expo in India, arranging coffee expo visit for Indian coffee exporters in different countries, organizing awareness creation program on the importance of coffee quality for all stakeholders throughout coffee supply chain, promotion of quality as a product positioning theme for Indian coffee and increasing the publicity of Indian coffee through different mass media.

Marketing strategies to improve export competitiveness of Ethiopian coffee exporters as identified by the respondents of the present study include shortening the coffee supply chain, removing uncontrolled participants in the export marketing system, launching of private quality inspection institute, marinating quality throughout the supply chain, following international market price, employing intensive and effective generic promotion of Ethiopian coffee, streamlining effective export facilitating system and logistics, providing training on the knowledge of international trade to coffee exporters, creating well organized warehouse management and also improve their operation, providing technical and managerial support for exporters, coffee exporter firms should be equipped with educated person , providing zero defect and best cup quality coffee, compliance to purchase order, increasing supply without losing its quality and continuous training for farmers.

5.2. Proposals for general and policy recommendations including future research areas

Based on evidence from the analysis of the present study, information reviewed from the previous studies, information collected from Indian and Ethiopian coffee exporters and personal interviews made with Secretary of Coffee Board of India and Ethiopian Commodity Exchange, Chief Strategy Officer, the following recommendations are proposed for improving the competitiveness of Indian and Ethiopian coffee industry in the export market.

The present study suggests to Indian and Ethiopian exporters to pursue new marketing strategies that involve market segmentation, value-adding activities, and strengthening local and global organizations to establish direct market links with consumers and stabilize prices.

Conducive business environment need to be created for local investors, especially in creating awareness on the benefit of value added coffee through easing the import duty on modern coffee processing machineries.

In order to ensure the quality of coffee being exported, it is necessary to unleash coffee Arabica's and coffee Robusta's full power through broadening the narrow genetic to breed next generation variety with exceptional quality, yield, diseases resistance and climate resiliency. This might be in place if coffee breeders across the two countries work with more synergy with the international collaborative projects like the International Multi Location Variety Trial (IMLVT). Additionally, to supply quality coffee to the export market on sustainable basis requires strengthening of extension services to increase in production and productivity.

Recently the Ethiopian coffee industry witnessed a negative incremental growth in value added coffee exports. Hence, the present study suggests that if Ethiopian value added coffee can be initially sold to leading global buyers to be marketed by them, Ethiopian coffee exporter companies can gain valuable experience of their product quality and price-quality equations in global markets. This can then be used to sell abroad using Ethiopian coffee brand names by the local coffee export firms.

Marketing effort is required to position the brand of Ethiopian coffee in the international customers mind with respect of the promptness of Ethiopian coffee export distribution strategy and export market segmentation strategy. Thus, the development of appropriate and effective service delivery including market information and export market infrastructural network should be the priority area for policy makers since Ethiopia is a landlocked country.

Generic promotional role for introducing and building the brand of Indian and Ethiopian coffee in the global market through frequent media coverage in the World press and television and conducting extraordinary events which may positively affect international perceptions of the two countries in building the brand of Indian and Ethiopian coffee is necessary.

The Coffee Board of India and the Government of Ethiopia have to look for partners to help for the expansion of local coffee processing and product packaging capacity and export of value added products of coffee in the emerging foreign coffee export markets. Thus, it would help to insulate Indian and Ethiopian coffee producers from the price volatility which affects global coffee bean markets.

Promotion can play vital role in ensuring the quality of a product through educating farmers. Thus, incorporating education to farmers in the websites of Ministry of Agriculture, Coffee Board of India, Ethiopian Exporters Associations, exporters, various state horticulture societies, research agencies, Agricultural Universities, growers' cooperatives, ware houses, processors, pack houses, export houses, and other sources on how to improve the quality of coffee and standards of quality coffee through dissemination of technical knowledge, pest control and disease control mechanisms, would help to increase the proportion of exportable coffee.

Valuing the importance of Fairtrade Certification of coffee would help exporters to secure additional price premiums and protect coffee growers from high price volatility shock that

might result from coffee crises by guaranteeing them a minimum floor price in return for assurances that profits will be used to benefit the producers' communities. On the other hand, organic certification generally adds approximately 10 percent to the price received by farmers.

There is a need to foster relationship with international buyers particularly, India with Japan and Germany. Whereas, Ethiopia with France, Other (countries categorized as other in the present study) and Saudi Arabia by organizing visit an in India and Ethiopia, respectively to match the need of consumers in these countries with the type and coffee quality expectations, thus stabilize the instability of the target market and increase their loyalty as they were found as unstable coffee export targets.

The Ethiopian Commodity Exchange [ECX] should create a transparent coffee marketing system and strengthen the coffee marketing service to ensure quality throughout the supply chain since it was as it was a concern expressed coffee exporters.

The Ethiopian coffee exporters mentioned that in terms of organizational structure exporters are suffering from cohesive national coffee policies and strategies to regulate the large number of institutions serving the coffee industry. Thus, simplification of Government policies particularly in structuring of the coffee industry to be under one organizational structure, responsible for research and development, transfer of technology, quality improvement, extending development support to growing sector, promotion of coffee in export and domestic markets with the aim of enhancement of production, productivity and quality; export promotion for achieving higher value returns for Ethiopian coffee and supporting development of domestic market as that of Coffee Board of India is necessary.

Facilitating exporters to build market linkage through union participation in specialty coffee association of America and export trade association annual exhibition to build market, regulate quality, and provide technical assistance in production (to the coffee growers), processing and export procedures would help develop a new highly efficient export market channels for India and Ethiopia.

It is necessary to organize "Cup of excellence" international competition within the country to identify and support geographic areas with comparative advantage for the production of quality coffee in the two countries, thus would result in receiving premium prices for high quality coffee.

Due to the increasing demand for specialty coffee such as Organic, Fairtrade and shade grown or bird friendly coffee trees in the export market, Indian and Ethiopian coffee exporters need to intensify their diversification to increase the revenue generated from coffee for participants involved across the coffee export market supply chain.

Lack of data or inconsistence of data may result in misinterpretations of results which may ultimately affect the entire economy of the country. Therefore, there is a need to pay attention for establishing well-organized national level data base system which can be freely accessible to the public which would greatly assist researchers to share their knowledge.

5.3. Conclusions

The analysis of trends and compositions of coffee exports in India and Ethiopia from 1980-2010, India witnessed a positive incremental growth in the production trend, export of green and value added coffee, prices paid to coffee growers. However, the recent trends from 2006-2010 indicates a shift from export of green coffee to value added coffee, and as a result green coffee Arabica witnessed a negative incremental growth. Additionally, a negative incremental growth was noted in production of coffee during pre-liberalization period.

Similarly, Ethiopia secured a positive incremental growth in the coffee production, domestic consumption, export, prices paid coffee growers from 1980-2010. However, negative incremental growth was noted in the volume of total coffee export and Roasted coffee export from the year 2006-2010.

Based on the trend in destination wise coffee export, Indian coffee exports to Italy, Germany and others; and Ethiopian coffee export to Japan, Saudi Arabia, Germany and other markets were found to have considerable growth potential despite the fact that these markets were characterized by nearly perfect competition for the Indian and Ethiopian coffee exporters, respectively. The Russian Federation and others target market for Indian coffee; and Germany for Ethiopian coffee was found as monopoly market. On the other hand, among the major Indian coffee export destinations, other, Italy and Germany were found to be high market retention potential while Germany, USA and Japan markets were found to be unstable market in terms of customer loyalty. Correspondingly, the Germany and USA markets were found with high retention potential for Ethiopian coffee while, France, others and Saudi Arabia was found to be unstable market.

The increasing market share of other countries for Indian and Ethiopian coffee exports clearly shows the need to explore and exploit their market potential similar to major selected export destinations.

The present study found that the role of the geographic location, the proximity of coffee export firms to major ports and proximity of the international buyers to the country ranked higher in determining coffee export marketing in India. Whereas, the role of the geographic location, export and import duty protection imposed by the Government of Ethiopia and the export policy of the country ranked higher in determining coffee export marketing in Ethiopia. On the other hand, the existence of large number of competitors in the coffee export market, the production and processing cost and barrier to entry were found to be negligible in determining Indian coffee export market. Whereas, the barrier to entry and procedures for fair trade and certification of coffee found were found to be negligible in determining coffee export marketing in Ethiopia.

With respect to the existing coffee export marketing strategies of Indian and Ethiopian coffee export market related to four marketing mix dimensions as well as from the export market positioning strategies, brand image building strategies and export competitive advantages of the two countries found that both Indian and Ethiopian coffee exporters' performance against the four marketing mix strategic dimensions were found to be above 50 percent in implementation of export product and distribution strategies. On the other hand, the Indian coffee exporters laid below 50 percent in the implementation of export promotional and pricing strategies. Whereas, Ethiopian coffee exporters' were found below mean 50 percent in the implementation of export promotional and pricing strategies.

From strategic point of view, the Indian coffee exporters were found to be in a better position in brand image building and strategic position of export firms despite the less effort made in brand image building and less competitive advantage. While, the Ethiopian coffee exporters were found in a better position in brand image building, competitive advantage and strategic position of export firms despite the less effort made in building the image of Ethiopian coffee in the customer mind.

The strength, weakness, opportunities and challenges (SWOC) exhibited in the export marketing of coffee in India and Ethiopia are well depicted using the following export marketing SWOC metrics model based on the result generated.

Coffee export marketing SWOC metrics model for India

S.	Strength	S.	Weaknesses

code		code	
S1	-Incremental growth in major coffee export target markets mainly from Germany and Italy and also from emerging Other target markets	W1	-Indian coffee exporters witnessed a negative incremental growth in major export target markets Viz., Russian Federation, USA and Japan
S2	-Exporters willingness to diversify in to exporting of value added products of coffee	W2	-The religious and social compliance of product packaging and layout to the international customer
S3	-Russian Federation and other emerging export target markets were found monopoly market destinations for Indian coffee exporters	W3	-Failing to use deliberate featuring of the exportable coffee in film or Television programs
S4	-Italy, Russian Federation and other emerging export target market of Indian coffee were found the most stable market with high retention potential	W4	-Failing to use modern communication techniques
S5	-The educational background of the management of the export company	W5	-Less awareness of coffee growers about the importance of coffee quality, lack of extension support and lack of skilled labourers, Lack of consistent agro-processing firms and lack of logistics facility during monsoons season
S6	-Offering direct mailing promotion and offering of leaflet/pamphlet/poster about coffee which is being exported as export promotional strategies	W6	-High operational cost and high price fluctuation
S7	-Reaching customers via their mail order as a means of export distribution strategies	W7	-Lack of finance to meet sudden huge demand in the export market
S8	-Offering variety of coffee in the international market	W8	- High competition between exporters and export agents
S9	-Following premium pricing strategy		
S10	-Competitive advantage of Indian coffee exporter in export market targeting and in collecting of marketing information		
S11	-Exporters are linked with MNC to facilitate their marketing effort		
S12	-The country is the member of WTO		
S13	-The geographic location and agro-climatic condition where coffee is being grown		
S14	-Proximity of the export firm to major ports		
S15	-Favorability of the export and import policy of the Government and strong institutional support		
	Opportunities		**Challenges**
O1	-The bilateral agreement with major export destination specially the Rupee-Ruble trade agreement with Russian Federation	C1	-High competition with Vietnam, Indonesia in major export markets targets
O2	-In order to discourage import of coffee of other origin, the import duty at100 percent is payable	C2	-Japan and Germany were found the most unstable export target market for Indian coffee exporters among the major

O3	-Italy, Russian Federation among major export destinations and Other emerging export target market were found as the most stable markets for Indian coffee		Indian coffee export destinations
		C3	-There is perfect competition in Italy, Germany, USA and Japan markets for Indian coffee exporters
O4	-Favorability of the export and import policy of the government and strong institutional support	C4	-No barrier to entry (export marketing of coffee)
O5	-The Coffee Board of India's promotional effort to introduce of the brand of Indian coffee in the international market	C5	-The existence of strong competitors export market strategy
		C6	-Low and inconsistent demand for value added products of coffee in the export market
O6	-Increasing export trend to emerging markets		
O7	-The increasing demand for value added products of coffee viz., Soluble coffee, Roasted coffee, Specialty coffee,	C7	-Lack of high quality coffee Robusta for further value addition
O8	-Increasing demand for organic and fair trade certified coffee	C8	-High price fluctuation

Summary of the Coffee export marketing SWOC metrics model for India

<table>
<tr><td rowspan="2">Factors
Factors</td><td colspan="2">Strength(S)</td><td colspan="2">Weakness (W)</td></tr>
<tr><td>Maintained</td><td>Maximised</td><td colspan="2"></td></tr>
<tr><td>1. S3 6. S11
2. S4 7. S12
3. S5 8. S13
4. S9 9. S14
5. S10</td><td>1. S1 4. S7
2. S2 5. S8
3.S6 6.S15</td><td colspan="2">1.W1 5.W5
2.W2 6.W6
3.W3 7.W7
4.W4 8.W8</td></tr>
<tr><td>Opportunities(O)
1.O1 5.O5
2.O2 6.O6
3.O3 7.O7
4.O4 8.O8</td><td colspan="2">SO (Maxi-Maxi) strategy
(Maximise Strengths and Opportunities</td><td colspan="2">WO (Mini-Max) strategy (Minimise weakness and Maximize Opportunities)</td></tr>
<tr><td>Challenges (C)
C1, C2, C3, C4, C5, C6, C7, C8</td><td colspan="2">SC (Maxi-Mini) strategy
(Maximize strength and Minimise challenges)</td><td colspan="2">WC (Mini-Min) strategy (Minimise weaknesses and Minimise Challenges)</td></tr>
</table>

Coffee export marketing SWOC metrics model for Ethiopia

S. code	Strength	S. code	Weakness
S1	- Ethiopia secured incremental growth in major export target markets mainly in Germany, Japan, Saudi Arabia, and France and in other emerging markets.	W1	-The Ethiopian coffee industry is mainly unprocessed coffee export oriented
		W2	-Failing to use retailer channels as a means of distribution strategy
		W3	-Lack of modern agricultural inputs
		W4	-Poor inventory and logistics system viz., processing, packaging and handling, transportation and warehousing
S2	- Germany and Others emerging export target markets were found monopoly markets for Ethiopian coffee exporters	W5	-Lack of training for farmers and exporters
		W6	-Less involvement of specialist along with the coffee farmer (growers) during growing, and harvesting of the coffee plantation
S3	- The educational background of the management of the export company		
S4	- Participating of exporters on different business-expo by representing the export company	W7	-Lack of export partner from Ethiopian coffee consumer countries
		W8	-Lack coffee processing machineries and the required skill and knowledge for value added products of coffee
S5	- Reaching customers via their mail order as a means of export distribution strategies	W9	-Insufficient financial support to diversify in to value added products of coffee
S6	- Providing highly acceptable brand and offering specialty coffee as export product strategies of Ethiopian coffee exporter	W10	-Less product variety
		W11	-The existence of unnecessary competition between the exporters as well as export agents
		W12	-Insufficient export promotional effort to introduce the brand of Ethiopian coffee through international mass media
S7	- Following premium pricing strategy		
S8	- Positioning of Ethiopian coffee in the international customer mind by focusing product quality	W13	-Less national level promotional scheme to support coffee exporters
		W14	-Existence of bureaucracy resulting from the existence of too many government offices handling the export process
S9	- Competitive advantage in marketing information collection	W15	-Ethiopia is observer to WTO
S10	- The geographic location where coffee is being grown		
	Opportunities		**Challenges**
O1	-Export and import duty protection imposed by the government of Ethiopia,	C1	-High cost of operation, high cost of processing plants, less technical knowhow of coffee exporters value added products of coffee
O2	-The favorable export policy of the country since the coffee sector is reserved for only Ethiopian national,	C2	-There is perfect competition in France, Saudi Arabia, USA and Japan markets for Ethiopian coffee exporters
O3	-Fluctuations in the currency rate against Ethiopian Birr is	C3	-France and Other emerging export target markets were found as the most unstable

	relatively good since it is one among the major factors determining coffee export marketing in Ethiopia		coffee export target for Ethiopian coffee exporters
O4	-Majority of small scale farmers are able to export their coffee directly through cooperative unions by bypassing the central warehouse of ECX	C4	-No barrier to entry (export marketing of coffee)
O5	-Strong bilateral trade relation with major export destinations	C5	-The distance of the export firms to major ports
O6	-The governments pressure to promoting export marketing of coffee than domestic consumption since it is one of the leading cash crop for export earning	C6	-Increasing number of contraband businesses
O7	-Increasing export trend to emerging markets	C7	-High operational cost of coffee marketing business
O8	-The increasing demand for value added products of coffee viz., Soluble coffee, Roasted coffee, Specialty coffee	C8	-Increasing domestic demand of coffee
O9	-Increasing demand for organic and fair trade certified coffee	C9	-The existence of strong competitors strategy in the export market
		C10	-High competition from Western countries for value added products of coffee business
		C11	-There is lack of policy that would encourage stakeholders to penetrate the value added products of coffee export market
		C12	-Less interest among Ethiopian coffee exporters in value added products of coffee business
		C13	-High price fluctuation in the international market
		C14	-Flexibility and continuous change in export policy

Summary of the coffee export marketing SWOC metrics model for Ethiopia

<table>
<tr><td>Factors
↘
Factors</td><td colspan="2">Strength(S)</td><td colspan="3">Weakness (W)</td></tr>
<tr><td></td><td>Maintained</td><td>Maximised</td><td colspan="3" rowspan="2">1.W1 6.W6 11.W11
2.W2 7.W7 12.W12
3.W3 8.W8 13.W13
4.W4 9.W9 14.W14
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</table>

5.4. Recommendations for future Research

Research is needed to assess the taste and preference of Indian and Ethiopian coffee consumers in the major export target markets and emerging coffee export market destinations (title deeds). This is mainly because, better understanding of the taste and preference of consumers from different target markets will help in meeting their needs, thus competitive advantage can be secured in major and emerging export target markets.

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APPENDECIES

APPENDIX

APPENDIX 1

Unit root test result for total volume coffee production in India 1980-2010 (adjusted: 1986 2010)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-12.72332	0.0000
Test critical values:	1% level	-4.374307	
	5% level	-3.603202	
	10% level	-3.238054	

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(D2TP(-1),2)	-3.140482	0.246829	-12.72332	0.0000
D(D2TP(-1),3)	0.644063	0.125861	5.117245	0.0000
C	109.3551	546.1204	0.200240	0.8432
@TREND(1980)	-3.716567	28.16523	-0.131956	0.8963

NB: TP denotes total volume of coffee production in India

APPENDIX 2

ADF –URT Result for total volume of coffee production in Ethiopia

Null Hypothesis: D(DTP) has a unit root

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-11.59617	0.0000
Test critical values:	1% level	-3.711457	
	5% level	-2.981038	
	10% level	-2.629906	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(DTP,2)

Method: Least Squares

Sample (adjusted): 1985 2010

Included observations: 26 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DTP(-1))	-3.109079	0.268113	-11.59617	0.0000
D(DTP(-1),2)	0.756787	0.150250	5.036864	0.0000
C	76.25565	122.3617	0.623198	0.5393

R-squared	0.946210	Mean dependent var	-69.94615
Adjusted R-squared	0.941533	S.D. dependent var	2575.666
S.E. of regression	622.7959	Akaike info criterion	15.81448
Sum squared resid	8921118.	Schwarz criterion	15.95965
Log likelihood	-202.5883	F-statistic	202.2951
Durbin-Watson stat	2.496612	Prob(F-statistic)	0.000000

NB: TP indicates total volume of coffee production in Ethiopia

APPENDIX 3

ADF –URT Result for total volume of coffee production in Ethiopia

Null Hypothesis: D(DTP) has a unit root

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-11.59617	0.0000
Test critical values:	1% level	-3.711457	
	5% level	-2.981038	
	10% level	-2.629906	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(DTP,2)

Method: Least Squares

Sample (adjusted): 1985 2010

Included observations: 26 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DTP(-1))	-3.109079	0.268113	-11.59617	0.0000
D(DTP(-1),2)	0.756787	0.150250	5.036864	0.0000
C	76.25565	122.3617	0.623198	0.5393

R-squared	0.946210	Mean dependent var	-69.94615
Adjusted R-squared	0.941533	S.D. dependent var	2575.666
S.E. of regression	622.7959	Akaike info criterion	15.81448
Sum squared resid	8921118.	Schwarz criterion	15.95965
Log likelihood	-202.5883	F-statistic	202.2951
Durbin-Watson stat	2.496612	Prob(F-statistic)	0.000000

NB: TP indicates total volume of coffee production in Ethiopia

APPENDIX 4

Table 1: URT result on volume of domestic consumption of coffee in India

Null Hypothesis: D(D2DC,2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-16.15158	0.0000
Test critical values:	1% level	-4.374307	
	5% level	-3.603202	
	10% level	-3.238054	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(D2DC,3)

Method: Least Squares

Sample (adjusted): 1986 2010

Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.

D(D2DC(-1),2)	-3.301365	0.204399	-16.15158	0.0000
D(D2DC(-1),3)	0.703968	0.103589	6.795745	0.0000
C	-6.946161	96.43632	-0.072028	0.9433
@TREND(1980)	0.239994	4.963863	0.048348	0.9619

R-squared	0.993505	Mean dependent var	41.47200
Adjusted R-squared	0.992577	S.D. dependent var	2061.941
S.E. of regression	177.6496	Akaike info criterion	13.34315
Sum squared resid	662747.1	Schwarz criterion	13.53817
Log likelihood	-162.7894	F-statistic	1070.740
Durbin-Watson stat	1.879769	Prob(F-statistic)	0.000000

NB: DC denotes the domestic consumption volume of coffee in India

APPENDIX 5

URT result on volume of domestic consumption of coffee in India

Null Hypothesis: D(D2DC,2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-16.15158	0.0000
Test critical values:	1% level	-4.374307	
	5% level	-3.603202	
	10% level	-3.238054	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(D2DC,3)

Method: Least Squares

Sample (adjusted): 1986 2010

Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(D2DC(-1),2)	-3.301365	0.204399	-16.15158	0.0000

D(D2DC(-1),3)	0.703968	0.103589	6.795745	0.0000
C	-6.946161	96.43632	-0.072028	0.9433
@TREND(1980)	0.239994	4.963863	0.048348	0.9619

R-squared	0.993505	Mean dependent var	41.47200
Adjusted R-squared	0.992577	S.D. dependent var	2061.941
S.E. of regression	177.6496	Akaike info criterion	13.34315
Sum squared resid	662747.1	Schwarz criterion	13.53817
Log likelihood	-162.7894	F-statistic	1070.740
Durbin-Watson stat	1.879769	Prob(F-statistic)	0.000000

NB: DC denotes the domestic consumption volume of coffee in India

APPENDIX 6

URT result for domestic consumption of coffee in Ethiopia, 1980-2010

Null Hypothesis: D(D2DC) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic based on Modified HQ, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-10.75250	0.0000
Test critical values:	1% level	-4.339330	
	5% level	-3.587527	
	10% level	-3.229230	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(D2DC,2)

Method: Least Squares

Sample (adjusted): 1984 2010

Included observations: 27 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(D2DCET(-1))	-1.656198	0.154029	-10.75250	0.0000

C	4.241516	133.3862	0.031799	0.9749
@TREND(1980)	-0.184919	7.133184	-0.025924	0.9795

R-squared	0.828100	Mean dependent var	0.177778
Adjusted R-squared	0.813775	S.D. dependent var	668.9919
S.E. of regression	288.6951	Akaike info criterion	14.27306
Sum squared resid	2000277.	Schwarz criterion	14.41704
Log likelihood	-189.6863	F-statistic	57.80817
Durbin-Watson stat	2.712654	Prob(F-statistic)	0.000000

NB: DC denotes the domestic consumption of coffee in Ethiopia

APPENDIX 7

URT result for coffee export volume from India

Null Hypothesis: D(D2EX,2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.208766	0.0000
Test critical values:	1% level	-4.374307	
	5% level	-3.603202	
	10% level	-3.238054	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(D2EX,3)

Method: Least Squares

Sample (adjusted): 1986 2010

Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.

D(D2EXIN(-1),2)	-3.004436	0.366003	-8.208766	0.0000
D(D2EXIN(-1),3)	0.550302	0.186688	2.947714	0.0077
C	-129.5494	500.4087	-0.258887	0.7982
@TREND(1980)	8.994259	25.84417	0.348019	0.7313

R-squared	0.975798	Mean dependent var	-90.64800
Adjusted R-squared	0.972340	S.D. dependent var	5581.136
S.E. of regression	928.2144	Akaike info criterion	16.65005
Sum squared resid	18093220	Schwarz criterion	16.84507
Log likelihood	-204.1256	F-statistic	282.2269
Durbin-Watson stat	2.629967	Prob(F-statistic)	0.000000

NB: EX denotes export volume of coffee from India

APPENDIX 8

ADF test on export volume of coffee from Ethiopia (1980-2010)

Null Hypothesis: D(D2EX) has a unit root/

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic based on Modified HQ, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-12.82715	0.0000
Test critical values:	1% level	-4.339330	
	5% level	-3.587527	
	10% level	-3.229230	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(D2EX,2)

Method: Least Squares

Sample (adjusted): 1984 2010

Included observations: 27 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.

D(D2EX(-1))	-1.910438	0.148937	-12.82715	0.0000
C	-75.72959	204.6149	-0.370108	0.7145
@TREND(1980)	5.307027	11.00195	0.482371	0.6339

R-squared	0.874215	Mean dependent var	-55.64444
Adjusted R-squared	0.863733	S.D. dependent var	1191.924
S.E. of regression	439.9909	Akaike info criterion	15.11582
Sum squared resid	4646208.	Schwarz criterion	15.25981
Log likelihood	-201.0636	F-statistic	83.40107
Durbin-Watson stat	2.693612	Prob(F-statistic)	0.000000

NB: EX denotes export volume of coffee from Ethiopia

APPENDIX 9

URT result of price paid to coffee Robusta growers in India

Null Hypothesis: D(D2PPGR, 2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.410604	0.0000
Test critical values:	1% level	-4.498307	
	5% level	-3.658446	
	10% level	-3.268973	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(D2PPGR,3)

Method: Least Squares

Sample (adjusted): 1991 2010

Included observations: 20 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(D2PPGR(-1),2)	-2.840010	0.383236	-7.410604	0.0000

D(D2PPGR(-1),3)	0.632475	0.204049	3.099618	0.0069
C	12.31290	23.00063	0.535329	0.5998
@TREND(1985)	-1.087113	1.390697	-0.781704	0.4458

R-squared	0.912902	Mean dependent var	-6.807975
Adjusted R-squared	0.896571	S.D. dependent var	111.2972
S.E. of regression	35.79367	Akaike info criterion	10.17028
Sum squared resid	20498.99	Schwarz criterion	10.36942
Log likelihood	-97.70276	F-statistic	55.90011
Durbin-Watson stat	1.998329	Prob(F-statistic)	0.000000

NB: PPGR denotes price paid to Robusta coffee growers in India

APPENDIX 10

URT result for prices paid to coffee Arabica growers in India

Null Hypothesis: D(D2PPGA,2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-9.016553	0.0000
Test critical values:	1% level	-4.374307	
	5% level	-3.603202	
	10% level	-3.238054	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(D2PPGA,3)

Method: Least Squares

Sample (adjusted): 1986 2010

Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.

D(D2PPGA(-1),2)	-2.975621	0.330018	-9.016553	0.0000
D(D2PPGA(-1),3)	0.676146	0.175531	3.852005	0.0009
C	-3.917619	24.28908	-0.161291	0.8734
@TREND(1980)	0.221324	1.253737	0.176532	0.8616

R-squared	0.926513	Mean dependent var	4.712104
Adjusted R-squared	0.916015	S.D. dependent var	155.6827
S.E. of regression	45.11701	Akaike info criterion	10.60204
Sum squared resid	42746.43	Schwarz criterion	10.79706
Log likelihood	-128.5255	F-statistic	88.25547
Durbin-Watson stat	2.644376	Prob(F-statistic)	0.000000

NB: PPGA denotes price paid to Arabica coffee growers in India

APPENDIX 11

Johansen Co-integration result on the prices paid to coffee Arabica growers against prices paid to Coffee Robusta growers in India from 1980-2010

Sample (adjusted): 1987-2010

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None	0.261578	8.902266	15.49471	0.3745
At most 1	0.065448	1.624520	3.841466	0.2025

Trace test indicates no cointegration at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigen value	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None	0.261578	7.277746	14.26460	0.4568
At most 1	0.065448	1.624520	3.841466	0.2025

Max-eigenvalue test indicates no cointegration at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

APPENDIX 12

URT result for prices paid to coffee growers in Ethiopia, 1980-2010

Null Hypothesis: D(D2PPG,2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.683609	0.0000
Test critical values:	1% level	-4.374307	
	5% level	-3.603202	
	10% level	-3.238054	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation .

Dependent Variable: D(D2PPG,3)

Method: Least Squares

Sample (adjusted): 1986 2010

Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(D2PPGET(-1),2)	-2.652540	0.305465	-8.683609	0.0000
D(D2PPGET(-1),3)	0.604872	0.164702	3.672527	0.0014
C	-1.210256	31.40917	-0.038532	0.9696
@TREND(1980)	0.043606	1.619505	0.026925	0.9788

R-squared	0.894530	Mean dependent var	3.288556
Adjusted R-squared	0.879462	S.D. dependent var	167.7931
S.E. of regression	58.25530	Akaike info criterion	11.11319
Sum squared resid	71267.28	Schwarz criterion	11.30821
Log likelihood	-134.9149	F-statistic	59.36929
Durbin-Watson stat	2.876684	Prob(F-statistic)	0.000000

NB: PPG indicates prices paid to coffee growers in Ethiopia

APPENDIX 13

World coffee market figures

colander year	Total production Crop years (million tons)	Total domestic consumption of all exporting country (million tons)	Total exports of all forms of coffee, crop years from all exporting country (million tons	ICO Composite Indicator Price Annual Average 1990 to 2009 (us cents per lb)**
1980	4.844	1.137	3.601	150.67
1981	6.030	1.188	3.780	115.42
1982	5.081	1.197	3.920	125
1983	5.355	1.134	4.049	127.98
1984	5.039	1.170	4.269	141.19
1985	5.410	1.152	4.405	133.1
1986	4.871	1.189	3.864	170.93
1987	6.475	1.113	4.093	107.81
1988	5.367	1.193	4.242	115.96
1989	5.647	1.166	4.973	91.67
1990	5.595	1.182	4.439	71.53
1991	6.094	1.225	4.792	66.8
1992	5.844	1.256	4.625	53.35
1993	5.520	1.296	4.457	61.63
1994	5.633	1.308	3.967	134.45
1995	5.219	1.365	4.465	138.42
1996	6.188	1.410	4.920	102.07
1997	5.982	1.460	4.684	133.91
1998	6.489	1.472	4.983	108.95
1999	7.800	1.482	5.559	85.71
2000	6.778	1.626	5.278	64.24
2001	6.462	1.700	5.146	45.59
2002	7.391	1.726	5.416	45.59
2003	6.378	1.795	5.279	47.74
2004	6.976	1.897	5.390	51.9
2005	6.678	2.004	5.284	62.15
2006	7.693	2.101	5.906	89.36
2007	6.998	2.225	5.649	95.75
2008	7.696	2.323	5.727	107.68
2009	7.389	2.429	5.677	124.25
2010	8.063	2.516	6.202	147.24

Source: Compiled from ICO

*NB: * denotes there is no figure for the respective years*

** denotes from October 1981,refers to the composite indicator price 1979 and from October 2001,refers to the composite indicator price 2001

APPENDIX 14

Kerala Agricultural University
Main Campus, College of Co-operation Banking & Management
Thrissur, Vellanikkara, KAU PO 680656 Kerala, India

Questionnaire to be filled by Indian and Ethiopian Coffee Exporters for partial fulfilment of Doctorate Degree in Rural Marketing Management

Name of coffee exporter Company_____
When the company started coffee export business ?_____
The average number of employees' _____
The average annual revenue of the Campany_____
Average quantity of coffee exported per year in Kilogram

1 Determinants of coffee export marketing in India/Ethiopia						
Which factors highly contribute for the success of Indian/Ethiopian coffee export market? (Tick 'X' mark) 1. Unfavourable 2. Less contribution 3. Average contribution 4. Good contribution 5. High contribution.						
1.1	**Legal and political factors in the international market**	**1**	**2**	**3**	**4**	**5**
1.1.1	The trade agreement between India/Ethiopia with different countries					
1.1.2	Export and import duty protection imposed by the government of India/ Ethiopia					
1.1.3	The support made by the government of India/Ethiopia to promote exporters					
1.1.4	The Export policy of India/Ethiopia					
1.1.5	The Export regulation of the international market					
1.1.6	Domestic export regulation and procedures					
1.1.7	The existing export market supply chain					
1.1.8	Fair trade certification of coffee					
1.1.9	Barrier to entry					
1.2	**Socio-cultural factors**	**1**	**2**	**3**	**4**	**5**
1.2.1	The language and communication of the products package					
1.2.2	The positive attitude, belief and values international customer towards your product promotion					
1.2.3	The religious and social compliance of your company products packaging and layout to the international customer.					
1.2.4	Educational background of the management of the coffee export company					
1.3	**Geographic factors**	**1**	**2**	**3**	**4**	**5**
1.3.1	The geographic location where coffee is being grown					
1.3.2	Proximity of the export firm to major ports					
1.3.3	Proximity of the international buyers to India/Ethiopia					
1.4	**Economic factors**	**1**	**2**	**3**	**4**	**5**
1.4.1	Fluctuations in the currency rate					

1.4.2	Production and processing cost					
1.4.3	Transportation cost					
1.4.4	Labour cost					
1.5	**The competitive environment**	**1**	**2**	**3**	**4**	**5**
1.5.1	High demand of coffee in the domestic market					
1.5.2	The existence of huge number of competitors in the coffee export market					
1.5.3	Strong competitors strategy in the international market					

2. The marketing mix strategy of coffee export company				
Which marketing mix strategy is being implemented by your company? Please tick 'X' mark which describes your company status on the implementation of the following strategy.		Being done	Done but not now	Planning in future
2.1	**Promotion strategy**			
	Providing special offer to international customers			
2.1.2	Offering coffee for new customers for user trial			
2.1.3	Offering direct mailing promotion to international customers			
2.1.4	Offering leaflet/pamphlet/poster about your product(coffee)			
2.1.5	Offering free gift to regular customers at certain intervals			
2.1.6	Taking initiative to arrange extraordinary events to promote the Indian /Ethiopian coffee at the international market.			
2.1.7	Participating on different business-expo by representing the export company			
2.1.8	Providing incentive to certified coffee supplier (producer)			
2.1.9	Deliberate featuring of your product (brand) in the film or Television programme			
2.2	**Place (Distribution) strategy**			
2.2.1	Reaching customers via their mail order			
2.2.2	Using channel coverage better than other coffee exporters			
2.2.3	The quality of coffee is not compromised throughout the market chain by using appropriate logistics and inventory system			
2.2.4	Providing sufficient information about the product on the company's website to the customer			
2.2.5	Products are being distributed using channel of mail order			
2.2.6	product are being distributed using retailer channel			
2.2.7	Product are being distributed using internet (online application)			
2.2.8	Product are being distributed using wholesaler			
2.3	**Product strategy**			
2.3.1	The variety of coffee grown in India/Ethiopia is preferable variety in the international market			
2.3.2	Following preferred supplier system			
2.3.3	Offering certified organic coffee			
2.3.4	Offering specialty coffee			
2.3.5	Offering high quality coffee better than other coffee exporter countries			

2.3.6	The brand of Indian/Ethiopian coffee acceptability at the international market is better than competitors' brand			
2.3.7	The contents of the packaging and design of coffee exported from India/Ethiopia complies with the culture, need and customs of international customer			
2.3.8	Offering fair trade coffee			
2.4	**Pricing strategy**			
2.4.1	Offering least price method			
2.4.2	Offering off price method			
2.4.3	Offering discount price			
2.4.4	Offering credit term to the customer			
2.4.5	Offering premium price			

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3. Export marketing program					
An effort made to position the brand of Indian/ Ethiopian coffee to be the best in the international market by influencing consumer perception relative to the perception of a competing coffee exporter countries brand. (Tick an 'X' mark) [1-Not as good as competitors of Indian/Ethiopian coffee exporter 2- As good as competitors of Indian/Ethiopian coffee exporter 3-Better than competitors of Indian/Ethiopian coffee exporter 4- **Do not know**]		**1**	**2**	**3**	**4**
3.1.1	Pricing strategy				
3.1.2	Product quality				
3.1.3	Distribution strategy				
3.1.4	Promotional strategy				
3.1.5	Export market segmentation strategy				
3.1.6	Export market targeting				
3.1.7	Product positioning strategy				

4. Export Marketing Strategies							
export marketing mix strategy (Rank the following indicators of export marketing mix strategies according to their level of importance in your company Please tick [**1**-Not important **2**- Little important **3**-I don't know its importance **4**- Important **5**- Very important **6**- ***It is not applicable to our business]***							
4.1	**Pricing strategy**	1	2	3	4	5	6
4.1.1	Offering of off-pricing						
4.1.2	Offering of discount offer						
4.1.3	Offering of payment period						
4.1.4	Offering of credit term system						
4.1.5	Following premium price through providing high quality						
4.2	**Promotion strategy**	1	2	3	4	5	6
4.2.1	Advertising						
4.2.2	Personal selling						
4.2.3	Sales promotion						
4.2.4	Public relation (Publicity advertising)						
4.2.5	Special offer						
4.2.6	Offering of coffee for user trial						
4.2.7	Direct mailing						
4.2.8	Free gift						
4.2.9	Joint venture						
4.2.10	Taking initiative to arrange extraordinary events to promote						

	Indian/Ethiopian coffee at the international market.						
4.2.11	Participating on different business-expo by representing the company						
4.2.12	Providing incentive to certified coffee supplier (producer)						
4.3	**Product distribution strategy (Place)**	1	2	3	4	5	6
4.3.1	Distribution channel						
4.3.2	Channel coverage						
4.3.3	Using multi-channel						
4.3.4	Using peer to peer channel						
4.3.5	Using retail channel						
4.3.6	Using whole sale						
4.3.7	Using mail order						
4.3.8	Using internet (online application to place an order)						
4.3.9	Using direct sale						
4.4	**Product strategy**	1	2	3	4	5	6
4.4.1	Product brand positioning						
4.4.2	Product variety						
4.4.3	Product quality						
4.4.4	Product packaging						

5. Competitive advantage of marketing variables

Competitive advantage of the coffee export company on the following marketing variables Tick An 'X' mark [1- Not as good as competitors of Indian/Ethiopian coffee exporter 2- As good as competitors of Indian/Ethiopian coffee exporter 3- Better than competitors of Indian /Ethiopian coffee exporter]

5.1	**Competitive advantage of marketing variables**	**1**	**2**	**3**
5.1.1	Product quality			
5.1.2	Product technology required for value addition			
5.1.3	Product flavour and taste			
5.1.4	Marketing information collection			
5.1.5	Pricing of the products			
5.1.6	Advertising and sales promotion			
5.1.7	Brand image of Indian /Ethiopian coffee			
5.1.8	Packaging			
5.1.9	Distribution co-ordination			
5.1.10	Transportation facilities			
5.1.11	Communication facilities			
5.1.12	Customer credit facilities			
5.1.13	Customer relationship			
5.1.14	Product varieties			
5.1.15	Efficient supply chain			
5.1.16	Comply with the export orders effectively			

6. General export marketing strategy			
6.1	**Please Tick an 'X' mark on 'Yes' or 'No' about export marketing of your company in general**	**Yes**	**No**
6.1.1	Does your company have a coffee (product) that has been successfully sold in the domestic market?		
6.1.2	Is your company preparing for an international marketing plan with defined goals and strategies?		
6.1.3	Does your company have sufficient supply (production) capacity that can be committed to the export market?		
6.1.4	Does your company have the financial resources to actively support the marketing of your products in the targeted overseas markets?		
6.1.5	Is your company's management committed to develop export markets and willing and able to dedicate staff, time and resources to the process?		
6.1.6	Is your company committed to provide the same level of product given to your domestic customers?		
6.1.7	Does your company have adequate knowledge in modifying product packaging and ingredients to meet foreign import regulations and cultural preferences?		
6.1.8	Does your company have adequate knowledge in shipping its product overseas, such as identifying and selecting international freight forwarders and freight costing?		
6.1.9	Does your company have adequate knowledge of export payment mechanisms, such as developing and negotiating letters of credit?		

6.2	**Please Tick an 'X' mark on 'Yes' or 'No' about Indian /Ethiopian coffee exporter marketing strategies particularly about brand Image building**	**Yes**	**No**
6.2.1	Media coverage given to Indian/Ethiopian coffee market by the world press and television is high		
6.2.2	The role of Export Promotion Agency to introduce Indian/Ethiopian coffee at the international market is high		
6.2.3	The occurrence of extraordinary events which may affect international perceptions of the country is high.		
6.2.4	Tourists from other countries have a good impression about India/Ethiopia from their personal experience.		
6.2.5	Are Indian/Ethiopian exporters linked with multinational companies to facilitate their marketing effort?		
6.2.6	Does your company participate on a trade show?		
6.2.7	Does your company have complete details of the products which are being sold?		
6.2.8	Does your company have indicative price lists, photographs or actual products where feasible at a trade show?		
6.2.9	Does your company have a person who knows two or three major		

	foreign languages during the trade show, to translate for prospective customers		

7 **Please write your views towards the following questions**

7.1 Please mention some of the most important deficiencies which seriously reduce the quality of Indian/Ethiopian coffee? ----------

7.2 Is there any technical assistance provided to coffee exporter in the marketing process?
A -Yes □ B No □

7.3 If your answer for question number 7.2 is "yes" what kind of technical assistance were given to you and by whom?.----------

7.4 What would be some strategies for the Indian/Ethiopian coffee industry to improve competitiveness in international markets?----------

7.5 Does your company provide value added processed coffee to international market?
A -Yes □ B -No □

7.6 Does your company provide value added processed coffee to local market?
A -Yes □ B -No □

7.7 What are the major challenges to provide value added processed coffee to the domestic and international market?----------

7.8 Is your Business insured? A Yes □ B No □

7.9 If your answer for question number '7.8' is "No" how do you recover risk of losses of exported product? ----------

7.10 Do Indian/Ethiopian coffee exporters have insurance coverage for loss existed on the exported commodity?
A -Yes □ B -No □

7.11 Does the geographic location where coffee is being grown in Indian/Ethiopia affects the quality of coffee in the international market?
A -Yes □ B -No □

7.12 If your answer for the above question is 'Yes' which particular coffee production area is preferable and why?----------

7.13 Is there any institution in Indian /Ethiopia promoting the brand of Indian/ Ethiopian

coffee in the international market?

A -Yes □ B -No □

7.14 If your answer for the above question is 'Yes' which institutions please list them ----

7.15 Describe the principal problems faced in the market chain from

A Producer to exporter:----

B From exporter to export agents----

C From exporter to the international market (final consumer)----

7.16 Is the different variety of coffee based on their geographic location, variety and quality standard are separated and handled separately?

A -Yes □ B -No □

7.17 If your answer for the above question is "No", explain why?----

7.18 Do you provide any price difference to coffee grower who supply quality coffee to your company?

A -Yes □ B -No □

7.19 If your answer for the above question is 'No', please explain why not.----

7.20 To whom do you sell the product? Please tick mark "X" in the box given

A -Processors □ B -Retailers □ C -Multi National Companies(MNC) □

D -Exporters □ E -Others agent at the international market □ F- Wholesalers □

7.21 From where your company buys coffee from producers

A -From the local market □ B -From their residence □

C -From your warehouse shop □ D -From co-operatives □

7.23 Is there a system which link smallholder farmers with coffee exporter through contract farming; put mechanisms in place for quality control in order to strengthen export sector?

Yes □ No □

7.24 Is there conducive business environment for investment, and policies to scale coffee exporters?

Yes □ No □

7.25 What are the most important problems exhibited in the marketing of coffee in general?----

If you have additional suggestion regarding coffee export marketing strategies for Indian/Ethiopian coffee export market please write here----

Thank You!

APPENDIX 15

EXPORT MARKETING STRATEGIES OF COFFEE IN INDIA AND ETHIOPIA

By
SHIFERAW MITIKU TEBEKA
(2012-25-101)

ABSTRACT OF THE THESIS

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Faculty of Agriculture
Kerala Agricultural University, Thrissur

DEPARTMENT OF RURAL MARKETING MANANAGEMENT
COLLEGE OF CO-OPERATION, BANKING AND MANAGEMENT
VELLANIKKARA, THRISSUR - 680 656
KERALA, INDIA
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ABSTRACT

Attempts were made to examine and design coffee export marketing strategies of India and Ethiopia with specific objectives of analysing the trends and composition of coffee exports; identifying the major determinants of coffee export; examining the coffee export marketing strategies of India and Ethiopia and suggesting appropriate coffee export marketing strategies for the two countries.

Primary data was collected using pre-tested questionnaire from 20 percent of the total Indian and Ethiopian coffee exporters. The samples were drawn using simple random sampling technique. In order to triangulate the findings of the study interviews were made with the Secretary of Coffee Board of India and the Ethiopian Commodity Exchange, Chief Strategy Officer. Additionally, time series secondary data Viz., production, export volume and monetary value, domestic consumption, prices paid to coffee growers, value added products of coffee were collected from different authenticated sources like International Coffee Organizations, World Bank, Coffee Board of India and Observatory of Economic Complexity from the year 1980-2010. Analytical models such as exponential compound annual growth rate, Instability analysis of linear coefficient of variation, Auto Regressive Conditional Heteroskedasticity and Generalised Auto Regressive Conditional Heteroscedasticity, Johanson Cointegration, Market share and Market growth model, Herfindahl–Hirschman Index, Markove Chain model of transitional probability matrix, Kendall's Wallis Coefficient of Concordance and simple descriptive statistics such as percentage and frequency were computed to analyse the data. Economic views (EVIEWS), Lingo Programming-Optimisation, Statistical Package for Social Sciences (SPSS), and Advanced Excel computer packages were used to generate results.

Accordingly, with regard to the trend in production, domestic consumption, exports, prices paid to coffee growers in India and Ethiopia from 1980-2010 the followings are the major findings.

The Indian coffee sector witnessed a significant positive incremental growth in production, domestic consumption, export and prices paid to coffee growers throughout the study period; the incremental growth noted during pre-liberalization period was not significant. On the other hand, with the exception of a negative incremental growth noted in the production and export volume of coffee from 1980-1990, the Ethiopian coffee sector witnessed a positive

incremental growth in production, domestic consumption, export and prices paid to coffee growers throughout the study period (1980-2010).

The increase in the volume of coffee production in India had a direct implication in the rise or drop in the volume of coffee export and domestic consumption of coffee during pre-liberalization period; this relation did not reflect on the rise or drop in the volume of domestic consumption of coffee during post-liberalization period. Likewise, the increase in the volume of coffee production in Ethiopia has reflected in the rise or drop of export volume of coffee; the volume of domestic consumption of coffee was found to be independent of production throughout the study period.

The trend in country wise export Italy and Russian Federation export target markets of Indian coffee and Germany and USA for Ethiopian coffee were found to be the most stable market with high retention potential; Japan and Germany export target markets for Indian coffee; and France and Other export target markets for Ethiopian coffee were found as the most unstable market.

With the exception of Russian Federation, USA and Japan export target markets, the growth in the volume of coffee export from India witnessed a positive and significant incremental growth in the major Indian coffee export destinations viz., Italy, Germany and Others. Similarly, with the exception of USA coffee export target market the growth in the volume of coffee export from Ethiopia has witnessed a positive and significant incremental growth in the major Ethiopian coffee export destinations viz., Germany, France, Japan ,Saudi Arabia and Others (based on the result generated by the Market share and Market growth).

Among the targeted markets of Indian coffee exporters Italy, Germany, USA and Japan markets were found being highly competitive market (characterized by perfect competition); while, Among the targeted markets of Ethiopian coffee exporters France, Saudi Arabia, USA, and Japan target markets were found being highly competitive market.

Among the targeted markets of Indian coffee exporters the Russian Federation market was found being monopoly market (characterized by highly concentrated market); while, among the targeted markets of Ethiopian coffee exporters Germany market was found being monopoly market.

In attempts made to identify the determinants of coffee export market in Indian and Ethiopia the geographic location and the proximity of coffee export firms to major ports were found to be the major determinants of coffee export marketing in India. Similarly, the

geographic location and export and import duty protection imposed by the Government of Ethiopia were found to be the major determinants of coffee export marketing in Ethiopia.

With the objectives of assessing the existing coffee export marketing strategies and design the future coffee export marketing strategies for Indian and Ethiopian coffee exporters providing leaflet, pamphlet, poster about their product (coffee) and offering direct mailing promotion to international customers were found to be the two major promotional strategies presently being implemented by Indian coffee exporters. Whereas, deliberately featuring the brand of Indian coffee in the film and/ or television programs found as the future export promotional strategies of Indian coffee exporters.

Participation of coffee exporters in business-expo in representing the export firms and offering coffee for new customer for user trial were found as the existing promotional strategies of Ethiopian coffee exporters. Whereas, deliberately featuring of the brand of Ethiopian coffee in film and or television program was found to be the future promotional strategies of Ethiopian coffee exporters.

Reaching customers via their mail order, meeting customers demand without compromising the quality of coffee throughout the market supply chain by using appropriate logistics were found as the existing export distribution strategies of Indian coffee exporters. While, creating on line application for receiving purchase order as well distributing products accordingly was found to be the future export distribution strategy for Indian coffee exporters.

Reaching customers via their mail order, meeting customers demand without compromising quality throughout the supply chain by using appropriate logistics and inventory system and distributing using wholesalers were found as the major export distributions strategies of Ethiopian coffee exporters. Whereas, using distribution channel coverage better than competing coffee exporter countries was found to be the future export distributions (place) strategies for Ethiopian coffee exporters.

Supplying preferable coffee variety by international customers and supplying specialty coffee were found as the two major export product marketing strategies presently followed by Indian coffee exporters. On the other hand, supplying certified organic coffee was found to be the future export product marketing strategy of Indian coffee exporters.

Providing preferable variety of coffee, offering specialty coffee and maintaining the good image of the brand of Ethiopian coffee at the international market was found as the major

export product strategies being implemented by the Ethiopian coffee exporters. On the other hand, offering of certified organic coffee was found as the existing and future export product strategy of Ethiopian coffee exporters.

Following premium pricing and offering credit term to the customers were found as the current and future export pricing strategies of Indian coffee exporters. Similarly, following premium pricing strategy was found as the most practically implemented export pricing strategies by Ethiopian coffee exporters. However, offering credit term to customers was found to be the future export pricing strategy of Ethiopian coffee exporters.

Employing export market targeting better than competing coffee exporter countries was found as areas where marketing efforts were made to position the brand of Indian coffee in the international customers' mind.

Supplying quality coffee at the right price better than competing coffee exporter countries was found as an area where marketing efforts were made to position the brand of Ethiopian coffee in the international customers mind.

Providing complete details of exportable coffee which are being sold including, participating on trade show, providing indicative price lists, photographs or actual products to show at a trade show were found as the major marketing strategies employed to build the brand of Indian coffee in the international customers' mind.

Providing of complete details of product being sold by Ethiopian coffee exporters and participating in trade shows and exhibitions were found as strategies employed to build the brand image of Ethiopian coffee in the international customer mind.

The competitive advantage Indian coffee exporters was found in collecting of market information in the export market; whereas, the competitive advantage Ethiopian coffee exporters was found to be both collecting of market information in the export market and product quality

Marketing strategies required for the Indian coffee industry to improve their export competitiveness in the export market as it was descriptively suggested by Indian coffee exporters are organizing of coffee exporters conference, provide financial incentives for coffee exporters for procuring quality coffee, providing more up-to-dated market intelligence service, coordinating and allowing coffee exporters to using export containers on sharing basis to reduce their operational cost, organizing coffee expo in India, arranging coffee expo visit for Indian coffee exporters in different countries, organizing awareness creation program on the importance of coffee quality for all stakeholders throughout the

coffee supply chain, promotion of quality as a product positioning theme for Indian coffee and increasing the publicity of Indian coffee through different mass media.

Marketing strategies required for the Ethiopian coffee industry to improve their export competitiveness in the export market as it was suggested by Ethiopian coffee exporters are shortening the coffee supply chain by removing uncontrolled participants in the export marketing system, launching of private quality inspection institute, maintaining quality throughout the supply chain, following international market price, employing intensive and effective generic promotion of Ethiopian coffee, streamlining effective export facilitating system and logistics, providing training on the knowledge of international trade to coffee exporters, intensifying the use of well organized warehouse management also improve their operation, providing technical and managerial support for exporters, coffee exporter firms should equip themselves with educated person, providing best cup quality coffee, compliance to purchase order, increasing supply without compromising quality and providing training for farmers on continuous basis.

Less awareness of coffee growers on the importance of coffee quality, unfavorable climatic condition, coffee diseases, lack of extension support, lack of skilled laborers, lack of consistent agro-processing firms, lack of logistics facility during monsoons season, unfavorable weather condition to maintain quality, difficulty to advertise individual product, high price seasonality, high competition of exporters and export agents, high operational cost and high price fluctuation were found as the major responsible factors attributed for reducing the quality of exportable Indian coffee.

Lack of modern agricultural inputs, increasing number of contraband businesses, poor farm practice including post harvest practices, poor inventory and logistics system, lack of training for farmers and exporters, less involvement of coffee specialist with coffee growers, poor handling and packaging of different origins of coffee, less awareness of coffee growers on importance of coffee quality, lower prices being paid to coffee grower and less attention for the prevention of indigenous breeds as well as introduction of new breeds were found as the major responsible factors reducing the quality of exportable Ethiopian coffee.

High processing and operational cost, high cost of planting coffee processing technology, low and inconsistent demand for processed value added products of coffee in the export market, lack of high quality coffee for further value addition, high labor cost and high cost of packaging materials were found as the major challenge for Indian coffee exporters to diversify into marketing of value added products of coffee in the export market.

It is necessary to organize "Cup of excellence" international competition within the country to identify and support geographic areas with comparative advantage for the production of quality coffee in the two countries; this would result in receiving premium prices for high quality coffee.

Finding export partner from Ethiopian coffee consumer countries, high cost of planting coffee processing technologies, lack of the required skill and knowledge for value addition of coffee, lack of finance and lack of policy that would encourage stakeholders to penetrate the value added products of coffee export market were found as the inhibiting factors for Ethiopian coffee exporter to diversify in to value added products of coffee.

Conclusively, despite the incremental growth noted in the volume of coffee production, domestic consumption, export and the prices paid to coffee growers it was found that there were different factors that come into play in determining the export marketing of coffee in India and Ethiopia. Accordingly, in response to the finding of the present study, marketing strategies which were sought to be appropriate in addressing the major challenges exhibited in the export marketing of coffee in India and Ethiopia were drawn in the form of general and policy recommendations.

General and Policy Recommendations

The study suggests that Indian and Ethiopian to pursue new marketing strategies that involve market segmentation, value-adding activities, and strengthening local and global organizations to establish direct market links with consumers and stabilize prices.

Easing the import duty on modern coffee processing technologies to motivate local investors in the coffee industry is necessary.

Breeders across the two countries should work with more synergy with the international collaborative projects like the International Multi Location Variety Trial (IMLVT) to come up with next generation variety with exceptional quality, high yield, diseases resistance and climate resiliency also strengthening of extension services to increase in production and productivity.

Generic promotional role for introducing and building the brand of Indian and Ethiopian coffee in the global market through frequent media coverage in the world press and television

and creating occurrence of extraordinary events which may affect international perceptions of the countries in building the brand of Indian and Ethiopian coffee is necessary.

The Coffee Board of India and the Government of Ethiopia have to look for partners to help with the expansion of local coffee processing and product packaging capacity to improve export of processed coffee to the emerging foreign coffee markets.

Incorporating education to farmers in varies coffee stakeholders websites on how to improve the quality of coffee and standards of quality coffee through dissemination of technical knowledge, pest control and disease control mechanisms is necessary

Fostering the relationship with international buyers is necessary especially India with Japan and Germany; while Ethiopia with France and Saudi Arabia since these markets were found to be unstable coffee export targets markets. Hence organizing visit in India and Ethiopia, respectively to match the need of consumers with the type and quality expectations, thus stabilize the instability of the target market and increase their loyalty.

The Ethiopian Commodity Exchange [ECX] need to create a transparent Coffee marketing system and strengthening coffee marketing service to ensure quality throughout the supply chain.

Simplification of Government policies particularly in structuring of the Ethiopian coffee industry to be under one organizational structure is necessary.